



# ARGENTINA:

Escaping crises,  
sustaining growth,  
sharing prosperity

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# **ARGENTINA:**

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sharing prosperity



## LIST OF ABBREVIATIONS AND ACRONYMS

ALMP	Active Labor Market Policies
AMBA	Metropolitan Area of Buenos Aires (Área Metropolitana de Buenos Aires)
ANSES	National Social Security Administration (Administración Nacional de la Seguridad Social)
AUH	Universal Child Allowance (Asignación Universal por Hijo)
BCRA	Central Bank of the Republic of Argentina (Banco Central de la República Argentina)
CABA	Autonomous Federal Capital of Buenos Aires (Ciudad Autónoma de Buenos Aires)
CEDLAS	Centro de Estudios Distributivos, Laborales y Sociales
ECD	Early Childhood Development
EPH	Permanent Survey of Households (Encuesta Permanente de Hogares)
EPHC	Continuous Survey of Households (Encuesta Permanente de Hogares-Continua)
EU	European Union
FAO	Food and Agriculture Organization
FTA	Free Trade Agreement
GCI	Global Competitiveness Index
GDP	Gross Domestic Product
GHG	Greenhouse Gases
GFS	Government Finance Statistics
GMO	Genetically Modified
GP	Global Practice, World Bank
GSURR	Global Practice for Social, Urban and Rural Development
GVCs	Global Value Chains
IDB	Inter-American Development Bank
IFC	International Finance Corporation
ILO	International Labour Organization
IMF	International Monetary Fund
IPs	Indigenous Populations
INDEC	National Statistical and Census Institute (Instituto Nacional de Estadística y Censos)
LAC	Latin America and the Caribbean
MERCOSUR	El Mercado Común del Sur
MSMEs	Micro, Small, and Medium-Sized Enterprises
NAFTA	North American Free Trade Agreement
New HICs	New High-Income Countries
NGO	Nongovernmental Organization
NREL	National Renewable Energy Laboratory
NTMs	Nontariff Measures
O*Net	Occupational Information Network Database Information Network database





OECD	Organization for Economic Co-operation and Development
PISA	Program for International Student Assessment, OECD
PIT	Personal Income Tax
PPP	Purchasing Power Parity
PPPs	Public–Private Partnerships
PUAM	Universal Pension for the Elderly (Pensión Universal para el Adulto Mayor)
R&D	Research And Development
RAP	Political Action Network (Red de Acción Política)
RC	Routine Cognitive
RER	Real Exchange Rate
SEDLAC	Socio-Economic Database for Latin America and the Caribbean
SCD	Systematic Country Diagnostic
SITC	Standard International Trade Classification
SMEs	Small And Medium Enterprises
STI	Science, Technology and Innovation
TFP	Total Factor Productivity
Trapped MICs	Middle-Income Trapped Countries
UK	United Kingdom
U.S.	United States of America
WBG	World Bank Group
WDI	World Bank’s World Development Indicators
WDR	World Development Report
WEF	World Economic Forum
WHO	World Health Organization
WTO	World Trade Organization
WWF	World Wildlife Fund



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The report has been written by Fernando Giuliano, Economist; María Ana Lugo, Senior Economist; Giovanni Ruta, Senior Environment Economist; and Emily Sinnott, Lead Economist and Program Leader based on inputs from a wide team of sector and country experts, and under the guidance of Jesko Hentschel, Country Director. The core team included Ignacio Apella, Social Protection Economist; Agustin Arakaki, Consultant; Laura Calderón, Consultant; Julián Folgar, Research Analyst; and Marco Larizza, Senior Public Sector Specialist. On the IFC side, the team consists of Luciana Harrington, Strategy Officer; Zeinab Partow, Principal Country Economist; and Valeria di Fiori, Operations Officer. The team relied on the contributions and support of many colleagues, country office staff, and consultants, including but not limited to the list below. The team gratefully acknowledges the overall guidance of Oscar Calvo-Gonzalez, Practice Manager Poverty and Equity; Valerie Hickey, Practice Manager Environment, Pablo Saavedra, Country Director for Mexico; Argentina program leaders Carole Megevand and Rafael Rofman, and Latin American and the Caribbean Chief Economist Carlos Vegh (LCRCE). The team also benefitted from insightful comments and suggestions of the peer reviewers: Marianne Fay, Chief Economist of the Sustainable Development Vice-Presidency; Luis-Felipe López-Calva, UN Development Programme (UNDP) Assistant Administrator and Regional Director for Latin America and the Caribbean; and David Rosenblatt, Manager of Strategy and Operations, Development Economics unit.



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## EXECUTIVE SUMMARY

### Setting the Stage

“Argentina: Escaping crisis, sustaining growth, sharing prosperity” is an analysis on the medium-term agenda to ensure growth and shared prosperity in Argentina and comes at a time when the country is embarking on deepening structural reforms while dealing with recent sudden financial market pressures that emerged in April 2018. The current government came into office at the end of 2015 facing a difficult legacy of macroeconomic and structural imbalances. It has made significant progress since then on important reforms. However, continued macroeconomic imbalances—with a primary deficit of 4.2 percent of gross domestic product (GDP) in 2017 and inflation of 24.8 percent at the end of 2017—combined with high external financing needs made Argentina vulnerable to increased emerging market turmoil at the end of April 2018, when the country experienced a large depreciation of the peso and a rise in country risk. In response, the government requested an emergency credit line with the International Monetary Fund in early May and accelerated some key reforms. This report was completed at the beginning of August 2018 amid Argentina’s continuing economic turmoil. The focus of the report is on medium- to longer-term development challenges in Argentina, rather than contemporaneous macroeconomic developments. The report looks at the policies needed to Argentina to end its vicious circle of 14 economic crisis since 1950, that the country experienced. This includes a substantial focus on macroeconomic policies to set in place the foundations for medium-term growth and shared prosperity by boosting jobs and productivity.<sup>1</sup> Achieving macroeconomic stabilization is a precondition for creating a healthy and vibrant economy. But deep reforms in areas varying from enhancing domestic competition, to developing capital

markets, to significantly improving education outcomes are necessary to ensure that the population benefits from a resurging private sector and renewed connection with the global economy. Learning from other countries’ experience in implementing structural reforms and gradually opening up their economies (like Australian reforms from the early 1980s and Sweden’s in the 1990s) is a long-term agenda, and a strong societal consensus will need to develop to support the changes for reforms to endure. Not to be underestimated is the importance of ensuring a strong safety net to support those who may be hit by structural changes in the economy.

Argentina is rich in natural capital assets and has a historically strong middle class. Along with its 2.8 million square kilometers, its extraordinary fertile land makes Argentina one of the largest agricultural producers in the world. The beef and soy sectors apply some of the most modern practices in the world and are leaders in breeding, agricultural machinery, and innovation. Argentina has vast natural resources in energy, with world-class wind and solar potential and the second-highest shale gas and fourth highest shale oil reserves in the world. In addition, Argentina has significant opportunities in some manufacturing subsectors and high-tech, innovative services. Argentina has a historically large and strong middle class. Social indicators are mostly good, and society deeply values education and knowledge as a means for potential mobility and improving status. Noted successes in research and innovation (four of the six most successful Latin American tech unicorn companies, with a value of over US\$1 billion, are Argentine [see Mander 2016]) makes the country a potential destination for high-value-added industries.

Nonetheless, compared to that of its peers, Argentina’s long-run economic performance has been disappointing, affecting the country’s ability to reduce poverty and increase incomes of its citizens. Average long-run economic growth in Argentina has been only 2.7 percent—about half that of high-performing countries in the region and less than a third the level of emerging countries in

<sup>1</sup> Shared prosperity requires that economic growth results in a sustainable increase in the living standards of the less well-off. The World Bank Group monitors progress in shared prosperity using the income growth of the population in the bottom 40 percent of the income distribution.





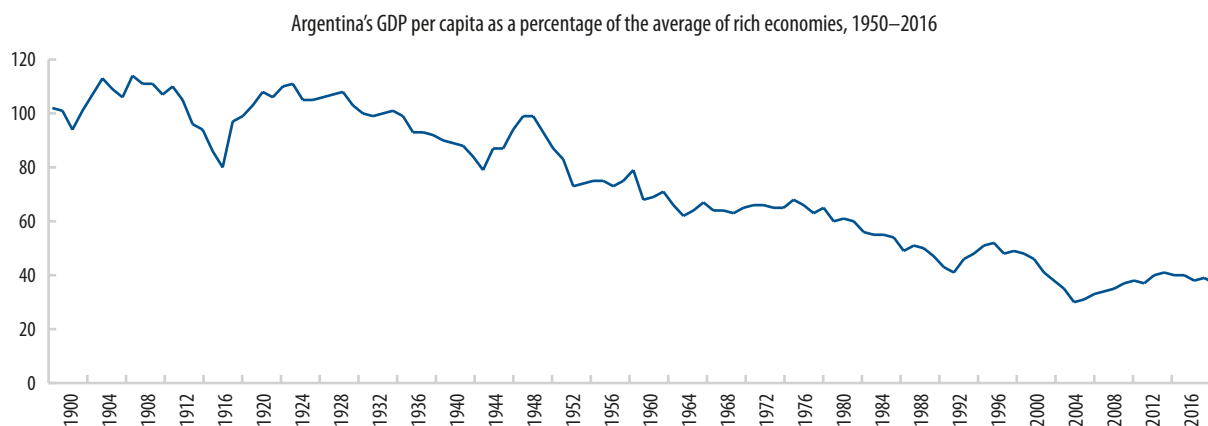
Asia. As a result, the country has consistently lost ground relative to rich economies; GDP per capita, which was similar to the average of a group of rich economies at the beginning of the 20th century, fell to only 38 percent of these rich countries' economic output per person today (see figure ES.1). Given its secular decline from relatively high levels of income per capita, Argentina can be referred as a unique country that did not grow, but rather fell, into middle-income status, and remained there. Furthermore, 40 percent of its population is today still vulnerable to falling into poverty, and growth has come at the expense of environmental sustainability (with 12 percent of forest loss between 2001 and 2014—double the world average). The lack of job creation in Argentina in recent years limited the significant progress made on poverty and shared prosperity in the previous decade, as the labor market deteriorated significantly since 2012.

The main explanation for this poor performance is Argentina's unusually volatile macroeconomic environment, reflected in large swings in economic activity. During the period 1950–2016, Argentina went through 14 recessions (one or more consecutive years of negative growth), with an average duration of 1.6 years. As a result, the country spent roughly one-third of the time since 1950 in recession. This is the most time of any country in the world except the Democratic Republic of the

Congo (figure ES.2), ranking with fragile states like Iraq and Syria and highly hydrocarbon-dependent countries. Uruguay, a neighboring country affected by Argentina's cycles, and arguably subject to similar external shocks, spent less than one-fifth of the time in recession. Recessions in Argentina not only occur often but also are deep. In an average recession cycle, Argentina's GDP contracts 3.5 percent per year. The result is a relatively weak growth performance: Average long-run economic growth in Argentina has been only 2.7 percent, below that of its regional peers (3.7 percent), new high-income countries (3.9 percent, see box 1.1 in the main report for a definition of this group), and Organisation for Economic Co-operation and Development countries (3.2 percent).

Institutions have played a central role in shaping the policy-making process in Argentina and—consequently—the volatility in economic policy making that has emerged. This report argues that economic policies are only one of many reasons for Argentina's decline in income relative to advanced economies. Economic policies are influenced as much by the quality of the institutions as by the “rules of the game” under which political and social actors interact. The way institutions function in Argentina has historically undermined the incentives to establish, enforce, and sustain intertemporal agreements on the content and direction of economic policies. Specifically,

**Figure ES.1:** Argentina's long decline from the top

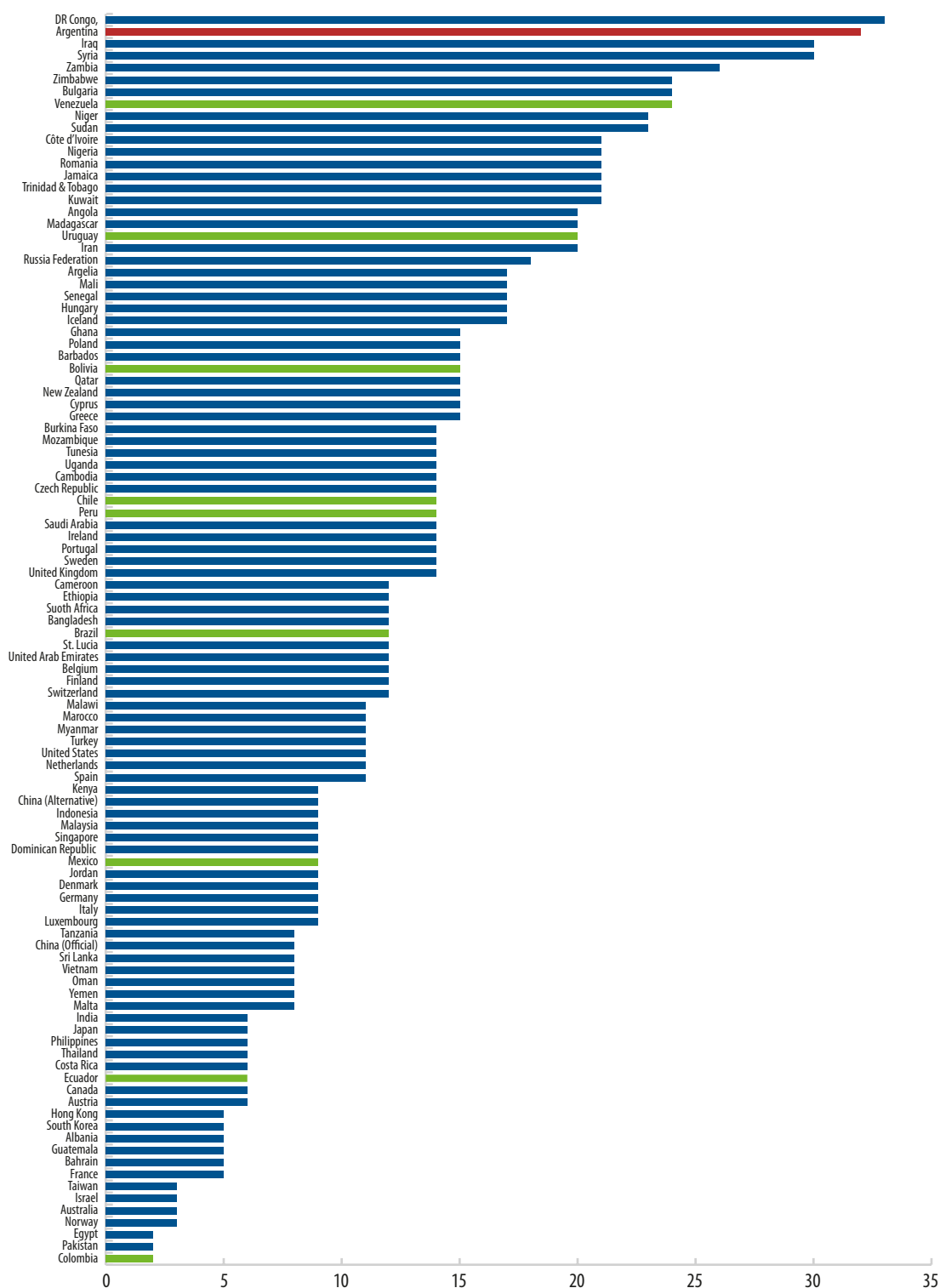


Source: Data from Maddison Project Database, version 2018. Bolt, Jutta, Robert Inklaar, Herman de Jong and Jan Luiten van Zanden (2018).

Note: Rich economies are Australia, Canada, Denmark, Germany, the Netherlands, Norway, Sweden, Switzerland, the United Kingdom, and the United States.



Figure ES.2: Since 1950, Argentina spent one-third of the time in recession



Source: Calculations based on data from the Conference Board's Total Economy Database.

Note: The graph shows the number of years in recession as a percentage of total years, 1950–2016.



there is historically a lack of success of major political institutions—including the executive, the legislature, the judiciary, and the state bureaucracy—in enforcing *credible commitment* and fostering *cooperative* behavior among actors. This lack leads to policies that are either too volatile (reflecting political opportunism and short-term calculations among actors—*cortoplacismo*) or too rigid (reflecting noncooperative behavior and distrust among actors, forcing them to ex ante rigid solutions to mitigate opportunistic behavior). These institutional features, which can be traced back to constitutional and electoral rules, as well as to a history of political instability, have limited the time horizon of policy makers, making longer-term structural reform programs difficult to get off the ground and sustain. Over the past years, important institutional reforms have commenced and an open dialogue about the need to foster and strengthen core institutions is taking place. The urgency to reform core institutions; foster functioning checks and balances between the legislative, executive, and judiciary; and ensure accountability of those holding office has recently been laid open by the widening notebook (*cuadernos*) scandal, involving fraud and corruption charges of public officials and a large number of private sector businessmen or representatives.

Distributive conflicts between the federal and the provincial governments have been at the heart of Argentina's political history, underlying the country's structural challenges. The stark economic inequalities among provinces and the structural features of Argentina's federal system imply that most provinces are highly dependent on the national government to finance their expenditures. In turn, presidents need to secure votes in Congress to implement economic policies. As a result, the policy-making process can be characterized as one of “deals” or “exchanges” between the Executive and provinces whereby governors grant political support in exchange for fiscal transfers. Historically, these political economy dynamics have translated into a fiscal transfer system that tends to favor resource-poor but vote-rich regions to strengthen the national ruling coalitions, undermining efficiency in resource allocations. They have also weakened the functional role of Congress as

an institutionalized arena to discuss and define public policies, and created incentives for short-term policies that are often fiscally unsustainable and associated with long-term economic costs. Recent developments are encouraging: they point to the emergence of a more fruitful dynamic. The Fiscal Pact agreed on between the national government and 23 of 24 provinces in November 2017 is an important step in coordinating fiscal policy at the national and provincial levels. The pledge to contain recurrent spending and public employment growth at the provincial level is core to avoiding a worsening of fiscal imbalances of the provinces in a time of high fiscal consolidation pressures.

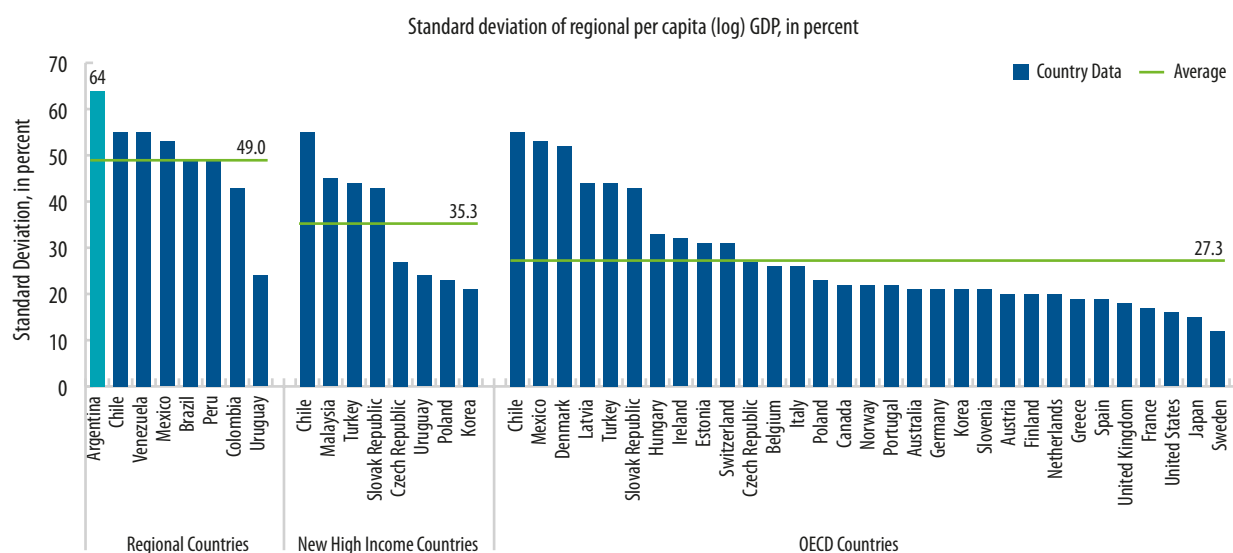
## What sets Argentina apart?

**Natural resource abundance.** Argentina is rich in natural capital, but underinvestment is holding back the country's potential. With 6.24 hectares per person, the country has one of the largest land endowments per capita in the world. Water is also abundant at the national level, though with wide regional variations. A favorable temperate climate makes Argentina's land fertile for rainfed crop production and cattle. Argentina has one of the largest continental shelves and is rich in marine and coastal resources. It is also rich in renewable energy resources, including hydro, wind, solar, and biofuels, which are largely untapped. Mineral and renewable resources are likely to play a growing role in the country's economic future. Finally, natural diversity and landscapes attract international visitors, building a strong tourism sector that importantly contributes to GDP and job creation.

**A historically large middle class with unmet high-income country aspirations.** Between 1880 and 1915, the country benefitted from an abundance of fertile land and the expansion of world trade. Land owners became increasingly wealthy, benefiting also from land policy that facilitated land concentration. The massive influx of immigrants, especially from Europe, dramatically changed the social structure of the country. By 1914, a third of Argentines were foreign immigrants, a large share of whom had nonmanual work experience. Favorable international trade conditions after the Second World



Figure ES.3: Argentina's regions have very heterogeneous income levels



Source: Data from Gennaioli et al. 2014.

Note: OECD = Organisation for Economic Co-operation and Development.

War, combined with industrialization and redistributive policies, led to a real income increase and a rapid decline in inequality (the income share of the top 1 percent). By the mid-20th century, Argentina had a strong and educated middle class, full employment, and many could enjoy a certain standard of living previously unseen. In a context of full employment, the construction of a social welfare state in which most contributed, ensured health care and generous pensions for an increasing proportion of the population. These benign economic conditions for workers and the establishment of a welfare state, led to a working class that aspired to become middle-class.

**Marked by significant vertical fiscal imbalance,** Argentina is a very unequal federation, with areas as rich as developed nations and provinces as poor as lower-middle-income countries. Argentina is a federal country comprising 23 provinces and the autonomous federal capital of Buenos Aires (Ciudad Autónoma de Buenos Aires, CABA). Heterogeneity across provinces in terms of income is very large.<sup>2</sup> Figure ES.3 compares the standard

deviation of (log) GDP per capita across subnational governments. Argentina is a clear outlier among comparator countries. Many important expenditure responsibilities lie at the provincial level, such as basic health care and education, whereas revenues are mostly collected at the national level. To help fund expenditures, a portion of revenues is redistributed back to provinces through an automatic revenue-sharing scheme (*coparticipación*), and by discretionary transfers by the executive branch. Although some degree of mismatch between expenditure and collection responsibilities is inevitable to guarantee the provision of relatively homogeneous services, in Argentina this is very large, with a sizable discretionary component. The need to provide homogeneous services across heterogeneous provinces generates perverse expenditure and revenue collection incentives, resulting in substantial fiscal challenges.

<sup>2</sup> CABA, the richest district of the country, has a GDP per capita of US\$28,358, whereas Formosa, the poorest province, has a GDP per capita of US\$3,704.



## A history of economic and policy volatility

Taken together, these three features of Argentina have combined in deleterious ways to result in a long-term disappointing economic performance. The high-income aspirations of a country with middle-class ambitions and the short-term considerations (*cortoplacismo*) of the political system combine to create enormous pressures to spend during booms. Often it is the booming agricultural sector that provides the high rents to fuel these fiscal expansions. The large vertical imbalances of the federal system and the tendency of political and economic actors to reach agreements through short-term “deals” has undermined the ability of public institutions to enforce long-term commitment to reforms and to sustainable policies that use the country’s rich natural assets to harness growth. This has frequently led to highly procyclical economic policies that amplify booms and busts. Successive crises have deepened this dynamic: growing impoverishment during downturns leads to high pressures to spend when economic conditions improve, and actors have over time lost their trust in the ability of the economy to deliver long-term stable growth, reducing their incentive to look beyond short-term gains. As a result, Argentina has failed to keep up with rich economies and has experienced an unusually volatile macroeconomic environment, reflected in large swings in economic activity and 14 crises since 1950.

One of the main explanations behind Argentina’s disappointing macroeconomic performance lies its tendency to “live beyond its means,” a practice that is an endogenous driver of its boom-and-bust cycles. The country’s social demands and political pressures yield an equilibrium characterized by excessive aggregate spending (that is, aggregate dissaving). The dissaving of the country as a whole is financed with savings from the rest of the world, reflected in a current account deficit. The tendency to overspend grows wider in booms, with

procyclical policies that result in consumption and investment (both public and private) growing faster than income. On the external sector this is reflected in increased imports through two channels. First, imports rise because of increased demand for imported consumption goods and production inputs. Second, a growing aggregate demand puts pressure on the market for non-tradable goods, increasing their relative price—a real appreciation that further increases imports. Because exports—mainly based on natural resources and held back by an extractive fiscal regime—usually fail to keep up with the rapid growth of imports, the current account deteriorates. This process usually comes to an end when the rest of the world refuses to continue to finance Argentina’s current account deficit, and it usually results in a sharp depreciation of the currency, a spike of inflation, a large drop in real wages, and a deep recession that reverts the current account wiping out a large portion of the welfare gains in the expansion period.

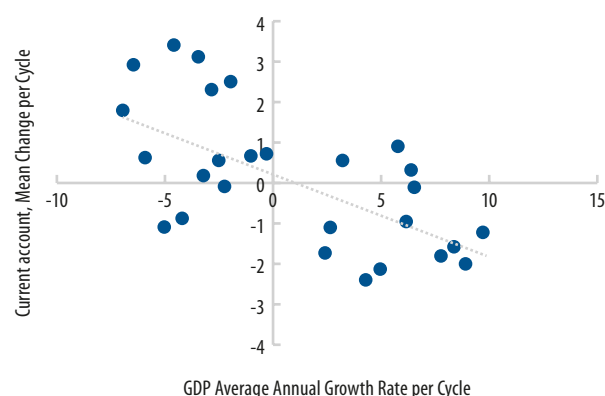
These boom-and-bust episodes in turn result in both underinvestment in natural capital (which takes time to reap rewards) and in extractive policies to generate short-term liquidity (generating the liquidation of assets and even illegal extraction). These cycles, sometimes referred to as “stop-and-go cycles” are illustrated in figure ES.4 showing the correlation between current account balance and GDP growth.<sup>3</sup> As the economy grows and the current account deteriorates, the external restriction starts to bind, and usually results in a sharp depreciation of the real exchange rate (RER). After a period of appreciation, the RER usually sharply depreciates, as shown by the spikes in figure ES.5. These large depreciation episodes triggered large contractions in economic activity. Defining large depreciation episodes as those where the exchange rate depreciates in one year by more than one standard deviation, there were five such episodes since 1950 that resulted in contractions in economic activity, usually large, with a decline on average of 5 percent per episode.<sup>4</sup>

<sup>3</sup> For an historical account of stop-and-go cycles, see for example, Diaz Alejandro (1970), or the more recent Gerchunoff and Llach (2007), Heymann (2007), Albrieu and Fanelli (2008), and Gerchunoff and Rapetti (2016).

<sup>4</sup> This does not include the most recent exchange rate depreciation episode in 2018.



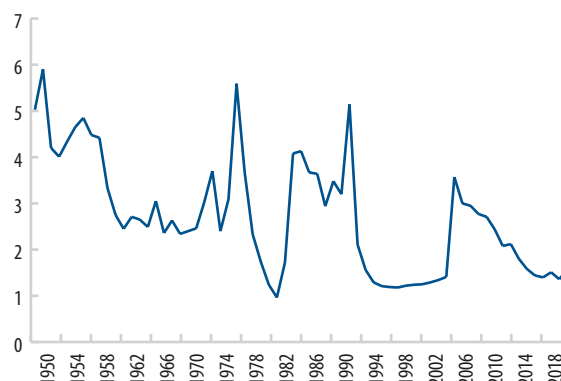
**Figure ES.4:** Correlation between current account as a percentage of GDP and GDP growth



Sources: Data from Ferreres 2005, *Instituto Nacional de Estadística y Censos*, and *Banco Central de la República Argentina*.

Notes: Each dot is a period of consecutive growth or contraction of economic activity, in percentage (x axis), and the corresponding change in the current account (CA) balance, in percentage points of GDP (y axis), all expressed in annual averages.

**Figure ES.5:** Real exchange rate index



Source: Ferreres, 2005.

Notes: A real depreciation of the peso is an increase in the index.

Institutionally, these cycles are reflected in the large swings in economic policy throughout the country's history. Among some of the most significant in the last quarter century: The country moved from a very rigid exchange rate regime (currency board established in 1991) to a managed float, to a dual exchange rate regime, and to the current flexible exchange rate. Trade was to be gradually opened when *Mercado Común del Sur* (Mercosur) was created in 1991, but the strategy was abandoned and reversed to the extent that in the 2000s an increased number of goods came to be subject to import controls. The privatization of public utilities in the 1990s turned to nationalizations from the mid-2000s onward and to the current focus on public-private partnerships. Argentina has moved from a “mostly free” economy in 1995 to a “mostly unfree” one in 2017 (Index of Economic Freedom)—a situation that the aforementioned economic reforms aim to rectify by reducing the constraints to economic activity.<sup>5</sup> Tax legislation has been enacted or modified over 80 times since 1988. Fiscal federal rules have been changed 14 times in the same period, and budgetary rules have been altered 16 times between 1992

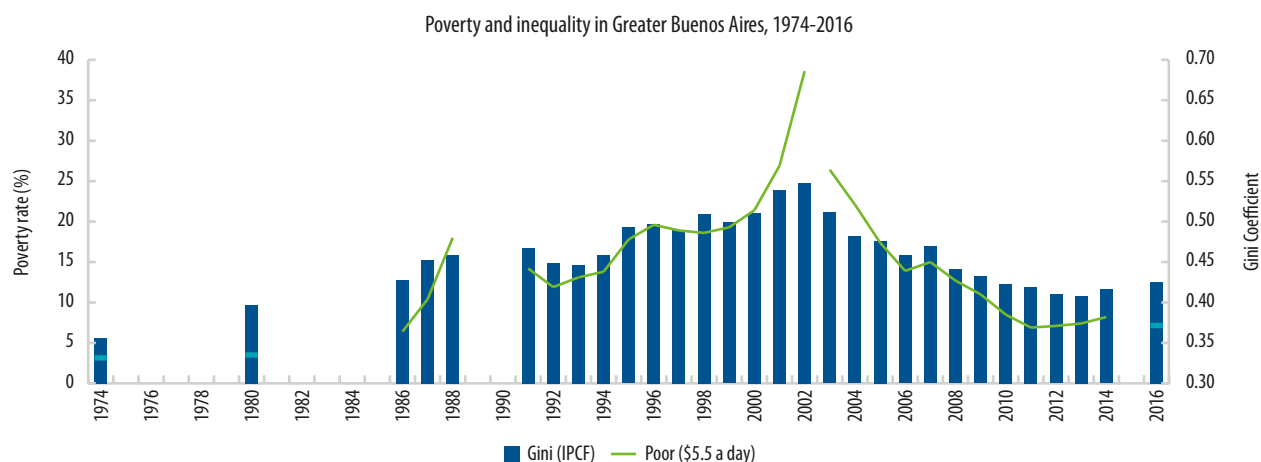
and 2008 (Bonvecchi 2010). Historically, policy volatility has typified Argentina for longer than the last quarter of a century. Using a measure of policy stability based on presidential speeches during 1940–2016, Argentina and República Bolivariana de Venezuela come out with the lowest policy stability using this measure, and were the countries that most diverged in economic output from the United States over 1940–2010 (Calvo-González, Eizmendi and Reyes 2017). Given this history, commentators today focus on the expectation of a strong possibility that the current direction of economic policy may be reversed in Argentina if political power shifts.

Recurrent crises and successive policy swings resulted in worsening welfare conditions from the mid-1970s to the early 2000s. Slow and unstable growth, deep political conflict, sweeping trade liberalization, and labor repression in the mid- to late 1970s were associated with increasing poverty and inequality (figure ES.6) (Altimir 2001; Gasparini and Cruces 2009). The hyperinflation, real depreciation, and economic contraction of the 1980s resulted in greater declines in real wages and rising labor

<sup>5</sup> The Index of Economic Freedom covers 12 freedoms, ranging from property rights to financial freedom, in 186 countries. According to the 2017 Index, Argentina ranks 156 out of 186 countries (see <https://www.heritage.org/index/>).



Figure ES.6: Recurrent crises worsened welfare conditions since the 1970s



Source: Data from SEDLAC (CEDLAS and World Bank), based on *Encuesta Permanente de Hogares-Continua*, <http://www.worldbank.org/en/topic/poverty/lac-equity-lab1> and for older data <http://www.cedlas.econo.unlp.edu.ar/wp/en/estadisticas/sedlac/>.

informality (Beccaria 2007), leading to rising levels of poverty. The following decade, although the economy was growing and inflation was under control, the sudden liberalization of trade along with an appreciated RER led to a rise in unemployment and informality, especially among unskilled workers. In the absence of wide compensatory social protection programs and with weak labor institutions, this rise led to a more unequal distribution of incomes, and an increasingly segmented society between the haves and have-nots (Cicowicz 2002; Galiani and Sanguinetti 2003; Gasparini and Lustig 2011). This situation worsened toward the end of the decade, when a recession finally led to the end of the convertibility regime in 2001/02, accelerated inflation, and saw poverty reach its highest level in Argentine history. After this deep crisis, employment conditions ameliorated, particularly for the less qualified. However, as macroeconomic unbalances accumulated, labor market improvements slowed and poverty stagnated.

The successive economic crises were also reflected in noneconomic aspects of well-being. Life expectancy improvements slowed, diverging from those of new high-income countries (new HICs) and Organisation

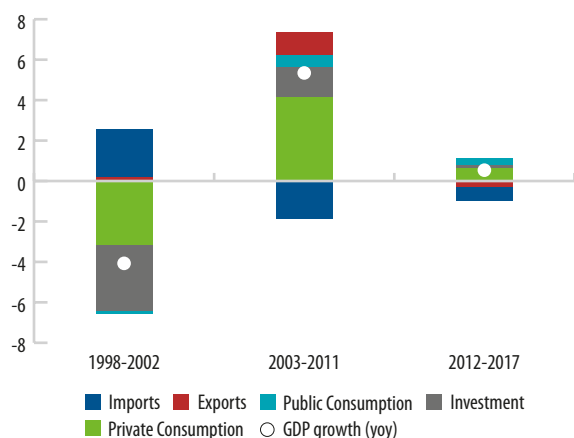
for Economic Co-operation and Development (OECD) countries and, after thirty years, instead came closer to the performance of regional peers. The quality of Argentina's education system, once seen as the top performer in Latin America and the Caribbean (LAC), has eroded and converged to the median in the region. For example, Argentina placed second in reading scores among thirdgraders in LAC at the end of the 1990s (in the United Nations Educational, Scientific, and Cultural Organization's first regionally comparable measurement), but fell to the LAC average in the latest round (Cassasus et al. 1998, 2014).

### Recent growth and shared prosperity trends

The aftermath of the 2001/2002 crisis provided an opportunity to address the country's recurrent macroeconomic imbalances and set the basis for long-term growth. The collapse of the Convertibility Regime and default on foreign obligations resulted in a massive real depreciation of the peso, a sizeable output gap, low wages, and a large fiscal surplus. In a context of expanding world demand and increasing commodity prices, the

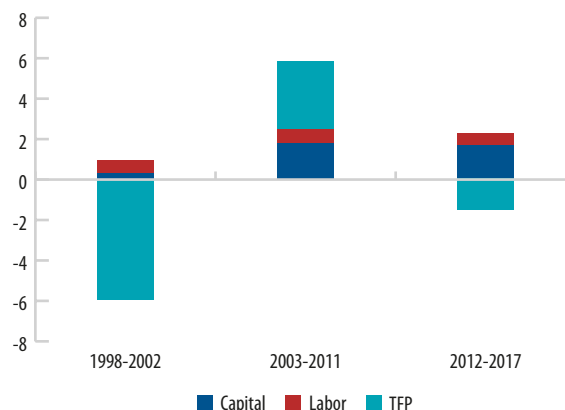


**Figure ES.7: Growth decomposition by demand component, period year averages, in percent**



Sources: Data from Ministry of Treasury, Argentina, and the World Bank's World Development Indicators dataset.

**Figure ES.8: Growth contributions by factor of production, period year averages, in percent**



Source: Data from The Conference Board.

Argentine economy recovered vigorously, growing 5.9 percent, on average, between 2003 and 2011.<sup>6</sup> But this was further fueled by expansionary fiscal and monetary policies to support high levels of private consumption (figure ES.7). The continued expansion of aggregate demand was met by increased intensity in the use of labor and capital, and by some productivity gains, mostly explained by a recovery from the large fall in 1998–2002 (figure ES.8).

By 2011, the demand-driven growth strategy showed signs of exhaustion, with macroeconomic imbalances becoming self-evident. General government expenditures had increased at an unprecedented pace, growing by over 11 percentage points of GDP between 2004 and 2011 to fuel mostly current expenditures on subsidies, pensions, and wages. Increased tax pressure failed to keep up with expenditures, leading to a rapid deterioration in the fiscal position that turned a 3.3 percent surplus in 2004 to a 7.8 percent deficit in 2016. Growing fiscal imbalances put pressure on the RER and current account, which moved to deficit for the first time in almost a decade. Especially after 2011, to tackle external imbalances, the government

turned to increasingly protectionist policies such as quantitative restrictions on foreign trade and foreign exchange markets, hurting productivity.

Macroeconomic imbalances grew wider in the years after 2011, following the deepening of the policies that generated them in the first place. In 2011–15, private job creation almost stalled. Government expenditure continued to grow far beyond historical records, productivity collapsed, and the current account deficit widened. The lack of access to international credit markets translated into a growing monetization of fiscal deficits, which further fueled inflation. The economy thus entered an annual cycle of recessions and expansions, with real GDP a mere 2.5 percent higher in 2017 than in 2011, a fall if measured in per capita terms.

With increasingly protectionist policies and a continuous real appreciation of the peso, the tradable sectors' share of GDP fell. Export taxes, high import tariffs, low competition, discretionary import licenses, and quotas in currency markets combined to reduce the share of tradable sectors in output, despite favorable commodity

<sup>6</sup> Geometric average, including the 2009 recession due to the international financial crisis.



prices and external conditions. Industries that produce goods, such as agriculture or manufacturing, grew by less than half the rate of the service sectors in the 2004–16 period (25 versus 57 percent). As a result, the share of goods-producing sectors in GDP (at producer prices) decreased by 12 percentage points from 44 to 32 percent. The share of services grew from 56 to 68 percent in the same period.<sup>7</sup>

The expansion of nontradable sectors resulted in a misallocation of employment to low-productivity activities. High-growth sectors since 2004 are mostly nontradable, such as construction, health services, or public administration. This is due not only to the continuous RER appreciation but also to deliberate policies to protect some sectors perceived as being major contributors to job creation, especially for low-skilled workers. These high-growth sectors have also experienced low productivity growth, a sign that productivity in the high-employment growth sectors has failed to catch up with the influx of workers. Unless those sectors had relatively high productivity to begin with, which they did not,<sup>8</sup> this points to a misallocation of employment to low productive uses. The misallocation is both a source and a result of low aggregate growth. Low growth results in low job creation, which in a context of a growing labor force (demographic bonus) leads to the need for some sectors, typically public administration and public education, to absorb the growing labor force. This vicious cycle generated a trap of low productivity, low job creation, and growing labor misallocation.

The shared prosperity process in 2004–11 was mainly driven by the recovery in labor incomes (figure ES.9). Family incomes grew largely because of the positive performance of labor income, particularly among the poorest households, recovering from the crisis as well as continued job creation after 2007. During this period, employment grew at a rate of 2.2 percent per year, driven by wage earners primarily in large firms. This increase

in employment and shrinking of the skill-wage gap is associated with the commodity boom that increased demand for low-skilled workers (Fernandez and Messina 2017; Messina and da Silva 2017). Also helpful was the recovery of idle capacity right after the crisis and a consumption growth model with a macroeconomic scheme that favored national firms (Beccaria et al. 2005). Government transfers became especially important for families in the lower deciles and contributed to the reduction of extreme poverty (Bustos and Villafañe 2011; Salvia et al. 2015.). Pensions were an essential source of additional family income—in particular, among the vulnerable—because of a pension fund moratorium, which led to a doubling of the coverage rate (from 40 to 80 percent) among elderly in the bottom quintile (Rofman and Olivieri 2012; Rofman et al. 2015). In addition, the phasing out of the *Jefas y Jefas de Hogar Desocupados* program (launched to address the 2001/02 crisis) was reversed with the creation of the universal family allowance program (*Asignación Universal por Hijo*, AUH) in 2010, reaching 15 percent of households by 2016.

Over 2011–16, family incomes across the whole distribution remained stagnant, primarily because of a contraction in labor incomes, compensated only partially by pensions and public transfers (figure ES.9). The meagre 1.1 annual employment creation was driven mainly by public employment and self-employment, whereas wage employment in large firms remains almost at the same level. This slowdown in job creation reflects the limitations of a demand-driven development strategy, in a context of less favorable terms of trade than in the previous years, which resulted in the decline in labor productivity. Manufacturing contracted by 6 percent between 2011 and 2016, and the main employment gains came from the expansion of services (including the public sector) and commerce. Rising inflation also reduced the real value of wages (8.7 percent in the five years over 2011–16), with the largest losses seen among self-employed and small-firm wage employees.

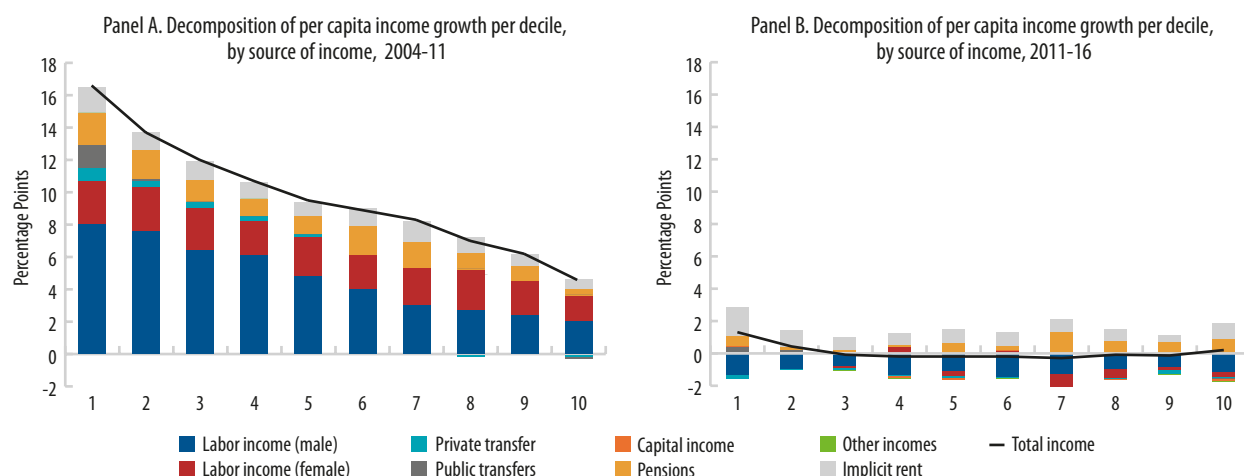
<sup>7</sup> Shares in current prices. In constant 2004 prices, the share of the service sector increased 5 percentage points.

<sup>8</sup> The sectors with highest value added per worker in 2004 were mining and oil, fisheries, and financial intermediation, in that order.





**Figure ES.9:** Shared prosperity over 2004–11 was mainly driven by the recovery in labor incomes, which stagnated over 2011–16, and were only partially compensated by pensions and public transfers



Source: Data from SEDLAC (CEDLAS) and World Bank, based on *Encuesta Permanente de Hogares-Continua*, <http://www.worldbank.org/en/topic/poverty/lac-equity-lab1>.

Despite improvements in the past 15 years, Argentina faces significant challenges in terms of poverty and shared prosperity. According to official estimations, 30.3 percent of Argentines living in urban areas are poor and 6.1 percent are unable to meet basic food needs (2016, second semester). Measured at US\$5.50 per capita per day in 2011 purchasing power parity (PPP) dollars (typical of upper-middle-income countries), the poverty rate in Argentina is about a third of the average level in LAC; however, it is still higher than in the new HICs and OECD countries (50 percent and almost two and a half times, respectively). Today, 2 million people live in informal settlements lacking property rights and basic services, which contrasts with the emergence of enclosed neighborhoods catering to upper-middle-income individuals and the rich. The country has reached high levels in access to improved water and educational attainment, but is still far from OECD standards in terms of infant mortality, the under-five mortality rate, and life expectancy. In addition, access to basic services such as education, health, and piped water or sewerage networks varies largely across provinces and across economic background. With a third of jobs being informal, economic opportunities for youth are limited—particularly among young women with low levels of education.

## Pathway to shared prosperity

The development model that Argentina needs to move to centers on achieving sustained growth by opening up the economy and putting in place the conditions for private sector-led growth. The transition to new sources of growth for development in Argentina involves a large and wide-ranging set of policy reforms (see figure ES.10 for an illustration of the transition needed). Advancing through this path will help the country avoid the boom-and-bust economic cycles predominant since 1950. The government is committed to advance a reform agenda, and has already made progress along several of the areas identified (see box ES.1 for further details). These policy reforms can be grouped along four pathways where progress is critical for sustainable growth and an expansion of shared prosperity. Without sound macroeconomic management that brings price stability and a fiscally sustainable path, the transition to a new development model will flounder. Pathway 1 concerns putting in place these fundamentals for growth. Economic growth in Argentina has come to rely on domestic demand and largely on the expansion of government spending. The country has begun the move to a more open, outward-oriented development model. Pathway 2 looks at the



policies that are necessary to support this model. Low investment, very undeveloped capital markets, and large physical investment needs have to be tackled. Reducing barriers to trade is only part of the story: the economy has to open up to domestic and international competition, and the highly concentrated market power some firms enjoy has to be reduced. For success, a larger group of firms will have to build the capacity to export and compete in a more competitive domestic market. Chapter 2 of the report describes Pathways 1 and 2.

Argentina has begun to implement this reform agenda to transform its economy, while dealing with the unwinding of macroeconomic imbalances and working to prevent a rise in poverty due to the transition. In December 2015, the government faced the challenge of large macroeconomic imbalances, substantial distortions to economic activity, and a weakened institutional framework: large fiscal deficits, monetization of the fiscal deficit, and high inflation were accompanied by price controls, large and regressive subsidies, trade restrictions, and the rationing of foreign currency. Credit and capital markets were extremely thin, and investment low. Reforms were put in place to eliminate foreign exchange controls and move to a flexible exchange rate regime, to establish an inflation-targeting framework for monetary policy, to gradually reduce energy and transport subsidies, to regularize relations with creditors, and to improve official statistics. Structural reforms have also been put in place to strengthen productivity and competitiveness by removing distortions holding back private sector-led growth, including reducing export taxes and easing import controls, improving the institutional framework for competition and capital markets, launching an ambitious infrastructure investment program to be financed by public-private partnerships, and reducing the costs of doing business. At the same time, there has been a focus on strengthening the legal framework to fight corruption and increase public sector transparency—which will now need to be tackled with higher urgency given the “notebook scandal” revelations about widespread fraud and corruption in the adjudication of public works programs (see box ES.1 for further details on the reforms put in place over 2016–18).

For the change to a new economic model to endure, growth will have to translate into better quality jobs, and the progress made on reducing poverty will need to continue. Pathway 3 (presented in chapter 3) outlines the constraints that will have to be overcome if people are to realize the dividends from a changed economic model. Success will entail bringing in more people to the labor market and increasing their productivity. Of concern, then, is the evidence that the population is falling behind in relative terms on educational outcomes—not a good sign for a country that needs to reverse its lagging economic performance and expand its middle class. Additionally, sustained and inclusive growth will require that everyone, irrespective of socioeconomic background or location, has access to quality services needed to accumulate assets. In the shorter term, it will also be important to enhance the extent to which social safety nets and active labor market policies can mitigate the negative social impacts of reducing market distortions and opening up to domestic and international competition in the transition period. Furthermore, integrating all of Argentina (and not just the richer areas) into the world economy will be important to expand the gains from opening up and making the economy more productive. Finally, Pathway 4 (chapter 4) outlines how protecting the environment and harnessing the value of nature for development will be essential to ensure the sustainability of economic growth.

From the long list of constraints identified in this systematic country diagnostic (SCD), it was necessary to distinguish those that are the most critical to achieving sustainable and inclusive growth (chapter 5). To prioritize among the constraints to growth and shared prosperity, the report uses the following criteria: (i) impact on the twin goals—this filter looks at the potential impact of removing a constraint on reducing poverty and increasing the welfare of the bottom 40 percent; (ii) complementarities—this filter assesses the degree to which an opportunity identified in one area might have positive impacts on other priority areas given the strong connections across a number of the challenges and that addressing one set of constraints might also trigger or be a condition for progress in other areas; and (iii)



## Box ES.1: Summary of key policy shifts and structural reforms in 2016–18

### Normalization of international relations

- The International Monetary Fund conducted its first Article IV consultation in a decade in November 2016. Argentina will hold the World Trade Organization Ministerial Conference in 2017 and the G20 Presidency in 2018.
- After 15 years, Argentina returned to international capital markets with the largest single bond issuance in history for an emerging country (April 2016).

### Main reforms

- **Monetary policy:** The Central Bank formally adopted an inflation-targeting regime with a floating exchange rate. In addition, it committed to gradually decrease financial assistance to the central government.
- **Statistics:** Since January 2016, the credibility of the National Statistical System was restored; as a result the International Monetary Fund lifted its Declaration of Censure on Argentine official statistics (November 2016).
- **Export and imports:** Export taxes were eliminated, with the exception of taxes on soybeans, which were reduced and for which the government announced a scheduled further reduction. An imports administration system replaced the mostly discretionary licensing regime in place until 2015. Foreign exchange controls were lifted after four years.
- **Subsidies:** Energy, water, and transport subsidies were reduced while keeping a social tariff for low-income users in water and transport and creating a social tariff for residential electricity and natural gas consumers. Energy subsidies will continue to decrease gradually until they are eliminated by 2021, with the exception of social tariffs.
- **Taxes:** The personal income tax floor was raised and family allowances expanded to reach 4.1 million children, up from 2.9 million. A successful tax amnesty program was implemented to encourage repatriation of undeclared funds held abroad, resulting in additional revenues of 1.6 percent of GDP. Recently, a capital gains tax was implemented for the first time.
- **Pension system:** Argentina's pension system accounts for 40 percent of the national budget. In December 2017, Congress approved a change in the pension indexation formula in line with international practice, and put in place the Universal Pension for the Elderly.
- **Competition:** A new Competition Law was passed by Congress on May 9, 2018. This law modernizes the regulatory framework for antitrust policy, including setting up a new authority with greater independence, introducing a leniency program for cartel agreements (such as price-fixing), improved sanctioning rules for anti-competitive practices, and a more efficient merger control system.
- **Capital markets:** A new Capital Markets Law—which modernizes the regulatory framework for capital markets, including by enhancing corporate governance, expanding the supply of financial assets, and targeting the widening of the domestic investor base—was passed by Congress on May 9, 2018.
- **Public-private partnerships framework:** Congress approved a new public-private partnerships framework to help address the country's existing infrastructure deficit and to stimulate private investment in key sectors of the economy such as infrastructure, housing, services, production, applied research, and technological innovation (November 2016).



### Box ES.1: cont.

- **Transparency:** President Macri declared his target of placing Argentina among the top countries in the world in terms of transparency. These efforts include the Access to Information Law that became effective in September 2017, the passing of the Corporate Criminal Responsibility Law to fight corruption in November 2017, ongoing reforms in procurement for public infrastructure and public procurement, and a renewed commitment for open government with the open data portal and the implementation of the second open government action plan.
- **Fiscal pact:** Long-standing disputes over transfers between the national government and the provinces were settled in a fiscal pact of November 2017. Provinces agreed to freeze current public expenditures in real terms and to decrease the burden of the highly distortive provincial turnover taxes.
- **Public employment:** The government enacted a voluntary separation scheme at the federal level to rationalize the public wage bill (April 2018). The program targets older employees from the national administration and government agencies.

### Reforms under discussion on structural agenda

- **Labor market reform:** Informal labor accounts for one-third of salaried employed workers. The government is discussing a labor market reform with the aim of providing incentives for formalization.
- **Trade:** Argentina is one of the most closed economies in the world. Trade reform needs to be carefully designed because a significant portion of labor is employed in protected sectors. Trade discussions between Mercosur and the European Union have resumed. The Pacific Alliance accepted Argentina as an observer member.
- **Education:** Argentina has high school dropout rates, especially in secondary school, and low learning outcomes. The government made important strides in moving evaluation to the center of debate, but further reforms are needed.

preconditions—this filter identified those constraints that need to be tackled as a precondition for achieving sustainable and inclusive growth.

Priorities are organized in two categories: cross-cutting institutional factors needed to enable growth and thematic priorities. Cross-cutting enablers are “drivers of success” for the more traditional thematic priorities. Enablers can magnify the effects of other reforms and their impacts on growth, inclusion, and sustainability over the long-term. They tend to be institutional in nature. The architecture of Argentina’s political and economic institutions plays a fundamental role as the underlying determinant of policy outcomes. Moving toward a sustainable and inclusive development model can therefore be proven difficult without addressing some of the more pressing

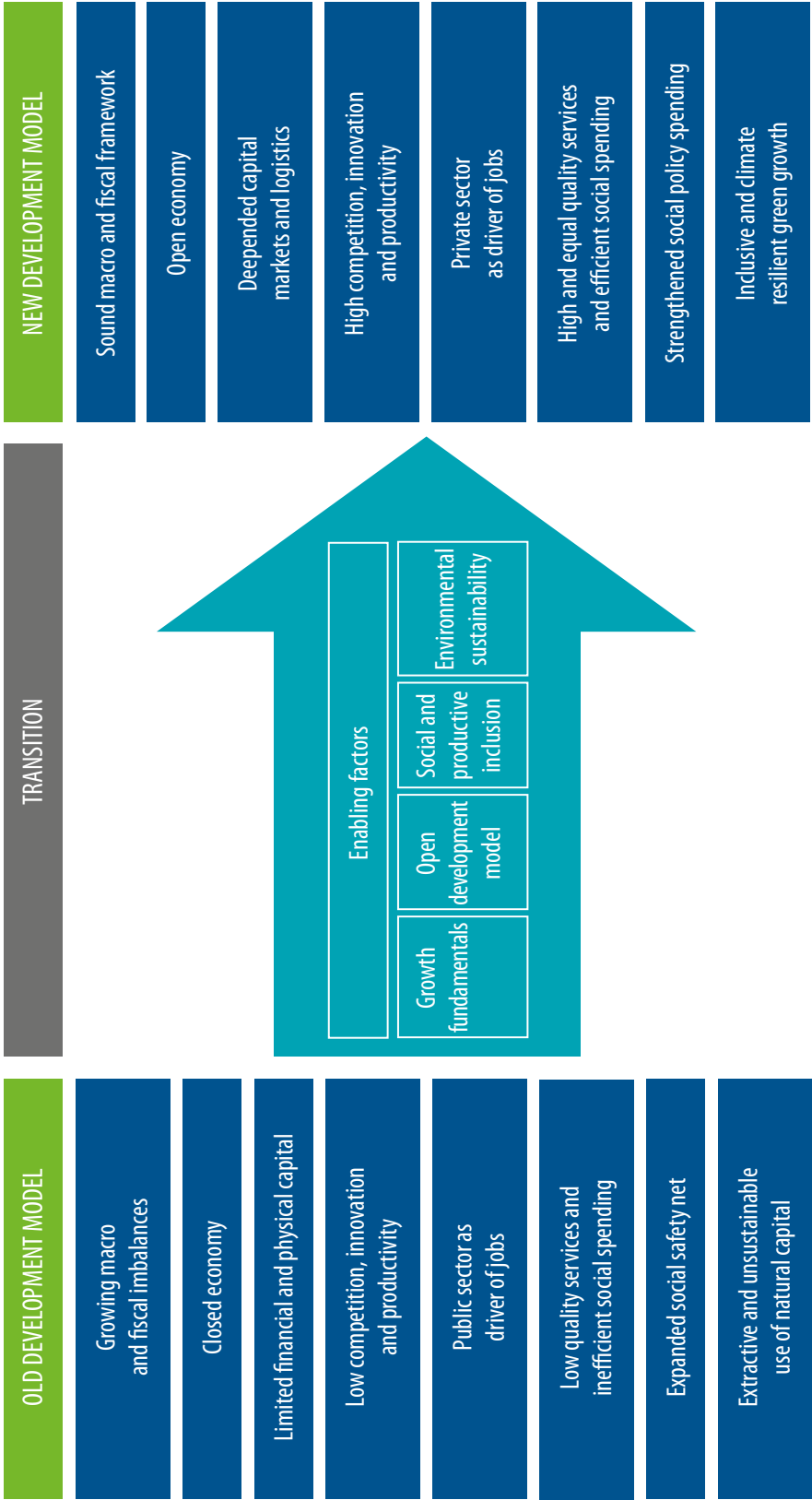
institutional challenges and governance constraints. The design and successful implementation of policies—in any sector or at any level of government—is, to a large extent, determined by the strength of the institutions and the coordination across levels. This section introduces the set of cross-cutting institutional factors to enable growth, which have emerged from the analysis and consultation process across most of the areas, and the sector-specific list of priorities identified.

### Cross-cutting institutional factors to enable growth

Strengthening the independence and efficiency of accountability institutions is needed to ensure law enforcement and reduce corruption. Transitioning toward



Figure ES.10: Argentina’s economic transition



Source: SCD team.



a sustainable and inclusive development model will prove difficult without addressing some of the pressing and fundamental institutional challenges and governance constraints, including the need to ensure an impersonal application of rules (from the “rule by law” to the “rule of law”). The experience of many countries shows that constitutional constraints become self-reinforcing when power in the system is distributed evenly and powerful elites and the political “system” accept the law’s limitations (Fukuyama 2010, 2014; North, Wallis, and Weingast 2009). For this transition to happen in Argentina, further efforts are needed to ensure better contract enforcement, an independent judiciary, and stronger accountability of institutions across all levels of government to be able to prosecute and sanction corrupt behavior. Over the past years, Argentina has made important strides in strengthening accountability and anti-corruption efforts: new or overhauled laws have been passed or are being discussed in the areas of corporate criminal liability, access to information, ethics and integrity, plea bargaining, and asset recovery; and accountability mechanisms have been strengthened significantly, such as those of the Anti-Corruption Office. In part, the revelations surrounding the *cuadernos* scandal—which are gaining in number and scale on a daily basis as this report is finalized—are fruits of such strengthened institutions. But this can only be a beginning of the necessary deep-rooted changes.

Supporting evidence-based decision making using high-quality data and information systems could contribute to reaching consensus and advancing reforms. Good, comprehensive quality data and information systems are necessary for the diagnosis, design, implementation, and monitoring and evaluation of key policy areas. Yet, the challenges in information across sectors are large, and the current sharing practices can undermine policy making. But in addition, transparency reforms and open data initiatives can also promote rational decision making based on best available evidence. Further efforts are needed to promote the reuse of these data and the dissemination of information to increase public scrutiny. In a context of often politicized debates on where and how to allocate scarce public resources, evidence-based

policy making can help bridge the ideological divide and support a rational debate about policy goals and strategic priorities. By centering on expected outcomes and rigorous assessment of the impact of public policies, an evidence-based approach can help government focus policy making on effectiveness of social interventions and efficiency in use of resources. This approach can contribute to mitigate polarization among political and economic actors, and increase the chances of bipartisan agreement.

Making federalism work by promoting cooperative behavior across governmental levels will be central to ensure successful implementation of policies. As indicated above, the need to provide homogeneous services across heterogeneous provinces generates perverse expenditure and revenue collection incentives, resulting in substantial fiscal challenges. Historically, the policy instruments and processes used to negotiate these distributional tensions between the national and provincial governments (including *participaciones* to provinces, public transfers, pensions, subsidies, and taxation) have proven harmful to Argentina’s achievement of its long-term development objectives. Moreover, in many cases, the decision making and implementation are decentralized to various regulatory agencies, without appropriate coordination mechanisms, and thus leads to increased fragmentation and undermines the capacity of the federal government to guide implementation. There is therefore an urgent need to make federalism work in Argentina by promoting a more cooperative behavior in which national, state, and local governments interact cooperatively and collectively to solve common problems. To this end, stronger central coordination would assist in making government actions more coherent and aligned with the overall strategic priorities and orientation of the country’s development agenda. Coordination of policies can be improved also by promoting reforms (such as those needed in education) that create incentives for subnational governments to improve public spending efficiency and comply with national policy guidelines and regulations, similar to the existing ones used in the health sector (*Plan Sumar*).



## Thematic priorities

Inclusive and sustainable growth will require progress on both equity and productivity fronts, as well as ensuring macroeconomic stability and enhancing environmental sustainability. The analysis done as part of the Systematic Country Diagnostic process identified a large set of economic priorities: of these priorities, 12 are considered to be core. The priorities have also been assessed in terms of their impact on the twin goals, their complementarity with the rest of the priorities, and their role as essential preconditions to the successful achievement of the remaining priorities. These have been largely confirmed through the systematic consultation with national and international experts.

The prioritization exercise suggests two tiers of priorities. Reforms included in the first tier are of first-order relevance, very important across the three filters. These include a sound macroeconomic management, better infrastructure, improved quality and relevance of education, and increased efficiency of spending. Improved fiscal policy for growth and equity can be pooled in the first-tier group, though with slightly lesser impact on twin goals. A second tier is headed by closing the gap in the provision of basic infrastructure services, important across the three dimensions, and the other priorities that have varying degrees of importance across the three filters.

### First-tier reforms

These reforms are led by sound macroeconomic management, which is also key in the short run, given current financial distress. This reform builds from the diagnosis that macroeconomic mismanagement and frequent economic policy reversals have been a source and outcome of successive boom-and-bust cycles and welfare swings. This is tightly linked to an improved fiscal policy for growth and equity because a sound macroeconomic management also entails a rebalancing of fiscal policy to reduce economic distortions and have an expenditure and tax policy that better supports growth and equity. Public expenditure needs to move to

a sustainable level in relation to economic output. Given the size of current fiscal imbalances, a fiscal consolidation is essential to stabilize public debt. Cuts to subsidies and other inefficient government programs need to continue, while the long-term aim should be to increase the share of spending going on growth-enhancing measures, such as priority public investment projects. The tax system needs to be redesigned to reduce the weight of distortionary taxes and to broaden the tax base. This should include a clear definition of expenditure responsibilities across different levels of government and a sound intergovernmental fiscal transfer system to ensure the efficient and equitable provision of public services, and improved subnational revenue-collection incentives.

Enhancing infrastructure is also seen as an objective of first-order importance. The quality of Argentina's infrastructure stock is deteriorating and this poses a challenge to competitiveness. Infrastructure investment is historically low, with very low participation of private sector financing, and unlikely to grow much owing to limited fiscal space. Moreover, logistics performance indicators are generally lagging. Good infrastructure and lower logistic costs are key to Argentina's ambitions in terms of growth. Although financing is a key bottleneck, more focused national and territorial goals, and efficient strategies can substantially reduce financing needs. In addition, upstream reforms will enable Argentina to improve spending efficiency and attract private financing on better terms—whether through public-private partnerships or commercial borrowing by public enterprises. Efforts to improve public investment institutions and frameworks—notably budgeting and procurement systems—should enable the country to substantially stretch the resources it already allocates to infrastructure. An improved framework for infrastructure planning, financing, and investing will be a key driver of competitiveness.

Improving the quality and relevance of education is identified as a first-tier reform related to fostering an inclusive economy. School readiness and early literacy skills are low, despite relatively high coverage. A focus on quality will also call for strengthening teachers' careers by





improving training curriculum, consolidating the network of training institutes, and creating the conditions to attract teachers and motivate them to perform. Recent reforms establishing annual standardized testing of students' learning outcomes, enforcing the communication of results to schools, and pre-service teachers' evaluations should contribute toward focusing the system on quality, although teacher evaluations are still pending. In fact, resistance by teachers' unions to education reforms are generally focused on changes in teachers' professional development. In addition, it will be essential to revamp secondary education focusing on developing critical basic cognitive and (21st century) soft skills, in line with *Secundaria 2030*.

Increased efficiency in the provision of health and education while ensuring equal quality for all will also contribute to an inclusive economy. With respect to increased efficiency in health and education, completion rates are low, learning outcomes are poor, and health outcomes high and unequal across provinces. Unequal access to quality services and inefficiencies reflect highly fragmented systems that lack coordination mechanisms across systems and subnational entities. Increasing efficiency will require making policies that are increasingly guided by evidence to help identify cost-savings initiatives, and a solid system of monitoring and evaluation. In health, efficiency could be substantially improved by establishing an appropriate model of care, where (i) several providers including a main primary care provider work together in an integrated, coordinated manner to provide care for an individual (with integrated information systems), and (ii) there is an emphasis on actively expanding effective coverage at the primary care level. As a result of these efforts, the health system would indeed be better placed to strengthen the prevention and control of the burden of noncommunicable diseases, especially in the context of an aging population. This also calls for the reduction of common risk factors associated with these diseases, such as unhealthy diets (particularly among children, where obesity is high), physical inactivity, tobacco use, and alcohol abuse

## Second-tier reforms

This group of very relevant reforms with a slightly lower level of priority is led by closing the gap in the provision of basic infrastructure services. Broad disparities persist in basic services, informal settlements, and connective infrastructure across regions and within large agglomerations. Access to safely managed water and sanitation services varies significantly across regions and between the core and the peripheries of large cities. There are 4,000 informal settlements in the country. Closing basic infrastructure service gaps, investing in connective infrastructure, and strengthening local capacity will be key for the convergence of living standards and for linking populations to economic opportunities. This will require enhancing integrated planning across different sectors, as well as widening the financial options and developing clear mechanisms to set up transparent systems of fiscal transfers across different levels of government.

A closely related priority refers to the development and deepening of financial and capital markets and household access to credit, which could be thought of as access to basic financial services. Argentina's very shallow financial markets reflect a gap in mechanisms that could better support growth, infrastructure, housing, and enterprise development for the private sector. Households, particularly those that are more vulnerable, have limited access to credit for productive investment and asset accumulation. Poorer people rely on personal loans or credit cards, with high interest rates. Expanding credit and mortgage markets will be essential. The new legal frameworks are encouraging, but substantial regulatory and institutional rollout measures are needed to ensure that financial and capital market products can operate in an enabling environment. These measures will also ensure that the government works with the private sector in developing new and innovative instruments to promote long-term finance for productive purposes and to generate new asset classes of financial instruments that can be more transparently priced and traded.





Two reforms directly linked to the open economy development strategy stand out for their impact on the twin goals and complementarities: increasing integration into the global economy and reducing barriers to competition and lower logistic costs. Key trade policy actions include lowering tariffs and nontariff measures in priority sectors, unilaterally reducing nontariff measures in input products, removing nonautomatic licenses to increase predictability, and boosting regional integration agreements to increase market access. Competition and trade authorities can further coordinate to harmonize technical standards with trade partners. To improve investment policy, Argentina can revise the incentives framework, introduce effective policies to promote links with local suppliers, and set up comprehensive regulatory improvement and simplification mechanisms. Jointly among competition and investment promotion authorities, the government can open up key sectors to investment. On the competition and logistics side, Argentina can continue strengthening its anticartel enforcement, implement the recently overhauled merger control framework, strengthen pro-competition sector regulation in key sectors such as telecommunications and transport, and implement competitive neutrality principles to ensure that public and private operators compete on a level playing field. The competition authority will need to be well-resourced, prioritize its engagements and actions, and achieve technical independence.

Two priorities on natural capital and environmental sustainability stand out. On the one hand, fostering climate-smart growth for the short and the long term relates to the climate impacts that are rapidly coming to the fore of Argentines' lives and economic activities. Whereas appropriate adaptation policies in key sectors including agriculture, water, energy, and health can help deal with impact in the present, a more systemic approach can offer more robust outcomes. By the end of this century, under an extreme emissions scenario, the projected warming could reach an average change of about 3.5 degrees Celsius in the north of the country, relative to present-day conditions. This will produce

important social, economic, and environmental impacts that will require strong policy shifts. Priorities to adapt to climate change involve proper costing of climate action, contingency planning, and a closer integration between the mitigation and adaptation agendas.

On the other hand, harnessing natural capital endowments through policies and investments stresses the need to leverage natural resources for growth in a sustainable way. Natural capital in Argentina includes agricultural soils and pastures, water, forests, fisheries, strong wind and solar potential, and subsoil assets (oil, gas, coal, and minerals). Some assets, particularly forest ecosystems and fisheries, are under significant pressures. Argentina has lost 21 percent of its forest cover in less than 25 years. At the same time, fish stocks have suffered from overexploitation because the country lacks a national management plan for sustainable and responsible fishing with a long-term vision. Yet these resources, along with the strong renewable energy potential, can be important sources of economic rents, jobs, and sustainable livelihoods. Unleashing the potential of natural capital requires breaking with the extractive policies of the past and consolidating a policy framework that attracts private sector investments. Policies, incentives, and enforcement are also required to ensure that the open access that characterizes many natural assets, such as forests, land, and fisheries, does not give way to illegality and degradation. Finally, a more sophisticated demand for greener attributes in global value chains is already emerging, and Argentina has much to gain from developing information mechanisms in support of labels and practices that encourage the thriving green businesses throughout the country.

Finally, an additional item will become increasingly important as Argentina's population ages: the need for a social consensus to ensure pensions are sustainable. Pensions are fundamental for protecting the income of the elderly population: poverty rates would be substantially higher in the absence of the recent reforms that expanded coverage. Two-thirds of the moratorium goes to the three



poorest deciles. But with 11 percent of GDP already accounted for by pensions, the mid-term sustainability is not currently guaranteed given the demographic transition and the current rules. There is a need to consider options that balance the high levels of generosity (which has recently increased with the *Reparación Histórica* that recalculated and adjusted benefits retroactively and going forward) with the broad coverage while ensuring future sustainability. This is particularly important as the government starts discussions on a future pension system reform. In this sense, the December 2017 parametric reform will help make the system more sustainable by changing the pension indexation mechanism to one that ties benefit changes more closely to changes in prices (and up to a minor extent to changes in wages). Nonetheless, in addition it would be desirable to broaden the agenda to revise all the parameters and components of the system, both contributory and noncontributory.

Moving along the reform path will not be easy. The forces that caused political and economic volatility in the past still linger and are likely to influence the future. Just as this Systematic Country Diagnostic was about to be completed, high devaluation pressures forced Argentina's government to increase its focus on short-term macroeconomic stabilization priorities. Without broad-based support and appropriate safeguards for the vulnerable, the reform process might stall. The proposed reforms can, however, face a different fate than previous reform efforts because they seek to put a comprehensive package of policies in place that simultaneously tackle growth challenges, inclusion concerns, and the potentially large scope for productivity improvements and natural capital-based growth.

A key element for government actions will be sequencing. Although all the priorities are identified as fundamental for sustainable and inclusive growth, the sequencing of reforms is essential for success. For example, it is undeniable not only that ensuring macroeconomic stability is a precondition for other priorities but also that its failure can undermine most of the progress achieved in

other dimensions. Improving the quality of social spending and investing in human capital are priorities that will see their fruits in the medium and long run, but today's inaction will prove costly. Within some of the priorities, sequencing of specific measures is also fundamental, as is the case of prioritizing the deepening of domestic competition prior to successfully integrating the country into the global economy. International experience of implementing large structural reforms reveals substantial potential gains; however, prior experience has also shown that proper sequencing and monitoring are essential to success. Comprehensive reform programs to deepen competition and open up the economies to trade and investment in Australia, Mexico, and Sweden took a decade or more to put in place. In addition, appropriate interinstitutional coordination, at the federal level and between the national and subnational governments, as well as public-private dialogue are required to achieve early wins and consolidate the reform process. Finally, improving infrastructure spending appears as not only to be a precondition of but also to have strong complementarities with other policies identified.

Some of these reforms are already underway, but there is a risk that the present context will mask the sense of urgency of key structural reforms whose outcomes are seen in the longer term. Continuing with the reform process is crucial before inequalities and vulnerabilities increase under the pressing fiscal challenges, and before the opportunity to embed the results of a decade of successful growth fades away. Sustaining a long-term commitment to policy reform on behalf of politicians, the private sector, and the population at large is challenging given the complexity and extensiveness of the reform agenda. Clearly communicating the gains and potential longer-term impact can help, as will political dialogue around interventions to minimize social conflict and generate the political capital needed. Over time, results achieved in these areas may serve to build political support and shift incentives.





# CHAPTER 1

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## SETTING THE STAGE

### Introduction

This report on the medium-term agenda to ensure growth and shared prosperity in Argentina comes at a time when the country is embarking on deepening structural reforms, while dealing with recent sudden financial market pressures that emerged in April 2018. The current government came into office at end-2015 facing a difficult legacy of macroeconomic and structural imbalances. Progress has been made since then by the administration on important reforms. However, continued macroeconomic imbalances—with a primary deficit of 4.2 percent of gross domestic product (GDP) in 2017 and inflation of 24.8 percent at end-2017—combined with high external financing needs made Argentina vulnerable to increased emerging market turmoil at end-April of April 2018, when the country experienced a large depreciation in the peso and a rise in country risk. In response to this, the government requested an emergency credit line with the International Monetary Fund (IMF) in early May and accelerated some key reforms.

This report was completed at the beginning of August 2018 amid the continued economic turmoil that has hit Argentina. The focus of the report is on medium- to longer-term development challenges in Argentina, rather than on contemporaneous macroeconomic developments. This includes a substantial focus on macroeconomic policies to set in place the foundations for medium-term growth and shared prosperity by boosting jobs and productivity. Achieving macroeconomic stabilization is a precondition for creating a healthy and vibrant economy. But deep reforms in areas varying from deepening domestic competition to developing capital markets to achieving greater education outcomes are necessary to ensure that the population benefits from a resurging private sector and renewed connection with the global economy. Learning from other countries' experience in implementing structural reforms and gradually opening

up their economies, like the Australian reforms from the early 1980s and Sweden's from 1990, is a long-term agenda; and a strong societal consensus will need to develop to support the changes for reforms that endure. Not to be underestimated is the importance of ensuring a strong safety net to support those who may be hit by structural changes in the economy,

Argentina is rich in natural capital assets and has a historically strong middle class. Along with its 2.8 million square kilometers, its extraordinary fertile land makes Argentina one of the largest agricultural producers in the world. The beef and soy sectors apply some of the world's most modern practices and are leaders in breeding, agricultural machinery, and innovation. Argentina has also vast natural resources in energy, with the world's second-highest shale gas and fourth-highest shale oil reserves. In addition, Argentina has significant opportunities in some manufacturing subsectors and high-tech, innovative services. Argentina has a historically large and strong middle class. Social indicators are mostly good, and society deeply values education and knowledge as a means for potential mobility and status. Noted successes in research and innovation (four of the six most successful Latin American tech unicorn companies—those with a value of over US\$1 billion—are Argentine [see Mander 2016]) makes the country a potential destination for high-value-added industries.

Nonetheless, compared to that of its peers, Argentina's long-run economic performance has been disappointing. Average long-run economic growth in Argentina has been only 2.7 percent—about half that of high-performing countries in the region and less than a third of the growth of emerging countries in Asia. As a result, the country's income per capita fell from being 70 percent of that of the United States in 1914 to only 33 percent today. Furthermore, 25 percent of the population lives in poverty and another 20 percent is still vulnerable to falling into poverty, and growth has come at the expense of the environment (with 12 percent of forest loss between 2001 and 2014—double the world average). The lack of creation of good quality jobs in Argentina in recent years limited the significant progress made on equity in the



previous decade. Although inequality as measured by the Gini index decreased by over 20 percent between 2004 and 2013, outpacing the reduction in the Latin America and Caribbean (LAC) region (5 percent), progress has since stalled.

## Falling behind

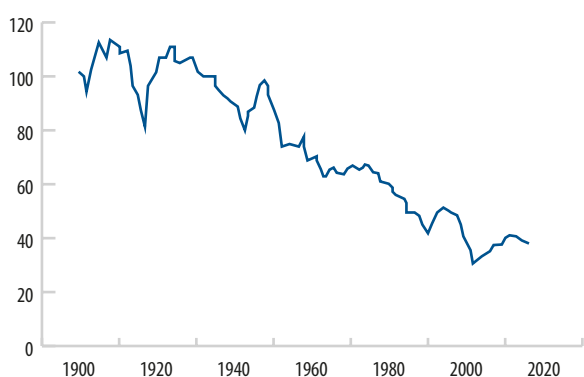
Argentina fell into middle-income status, failing to keep up with its high-income peers of the early 20th century. Since the mid-20th century, Argentina has consistently lost ground relative to rich economies, and has now joined a group of middle-income countries failing to catch up with more developed peers, usually referred to as middle-income trapped countries (see box 1.1). Argentina's GDP per capita was similar to the average of a group of rich economies by the beginning of the 20th century, but has now dropped to 38 percent of these rich countries' economic output per person (see figure 1.1).<sup>1</sup> Given its secular decline from relatively high levels of income per

capita, Argentina can be referred to as a unique country that did not grow into, but fell into, middle-income status and remained there.

Poor GDP growth has reinforced itself through slow capital accumulation. Sustained long-term economic growth requires investment and maintenance of assets, measured comprehensively to include produced capital, natural capital, human capital, and net foreign assets. Recent estimates of comprehensive wealth show that Argentina's poor GDP performance has been on par with the country's total wealth evolution. Between 1995 and 2014, the average annual growth rate of wealth per capita was about 1 percent, that is, slower than for most of Argentina's peers, except Mexico (0.2 percent) and Turkey (nil; figure 1.2). It has been much lower than in Chile (4.3 percent), Peru (4.2 percent) and Uruguay (4 percent). This means that slow growth reinforced itself via slow accumulation of total wealth.

The main explanation for this poor performance is Argentina's unusually volatile macroeconomic

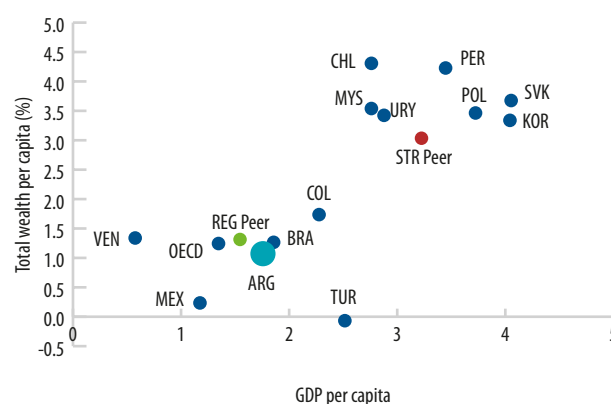
**Figure 1.1:** Argentina's GDP per capita as a percentage of the average of rich economies, 1900-2016



Source: Data from Maddison Project Database, version 2018; Bolt, Jutta, Inklaar, de Jong, and van Zanden (2018).

Note: Rich economies are Australia, Canada, Denmark, Germany, the Netherlands, Norway, Sweden, Switzerland, the United Kingdom, and the United States.

**Figure 1.2:** Change in GDP vs. total wealth per capita, 1995-2014

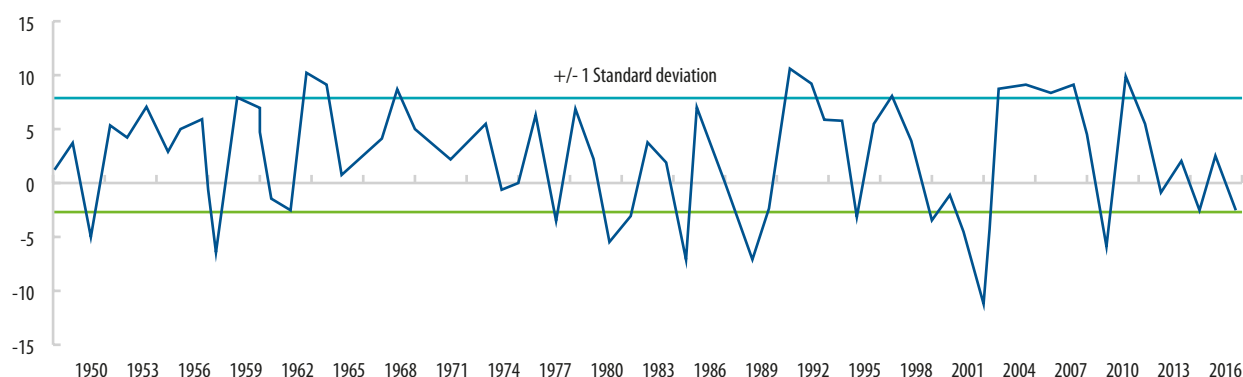


Source: Data from Lange, Wodon, and Carey 2018.

<sup>1</sup> The 10 economies were chosen using the following methodology: from the 15 richest economies in 1950, 1985, and 2015, we selected the 10 richest economies repeated on the three sample years (excluding small island states and countries of the Organization of the Petroleum Exporting Countries). These are Australia, Canada, Denmark, Germany, the Netherlands, Norway, Sweden, Switzerland, the United Kingdom, and the United States.



**Figure 1.3:** Argentina's GDP growth rate, in percent, 1950-2016



Source: Data from Ferreres 2005 and *Instituto Nacional de Estadística y Censos*.

**TABLE 1.1. ARGENTINA'S ECONOMIC CYCLES, 1950–2016**

	Expansions	Recessions
Number of events	14	14
Average duration (years)	3.4	1.5
Average annual GDP change (in percentage)	5.8	3.7

Source: Calculations based on The Conference Board.

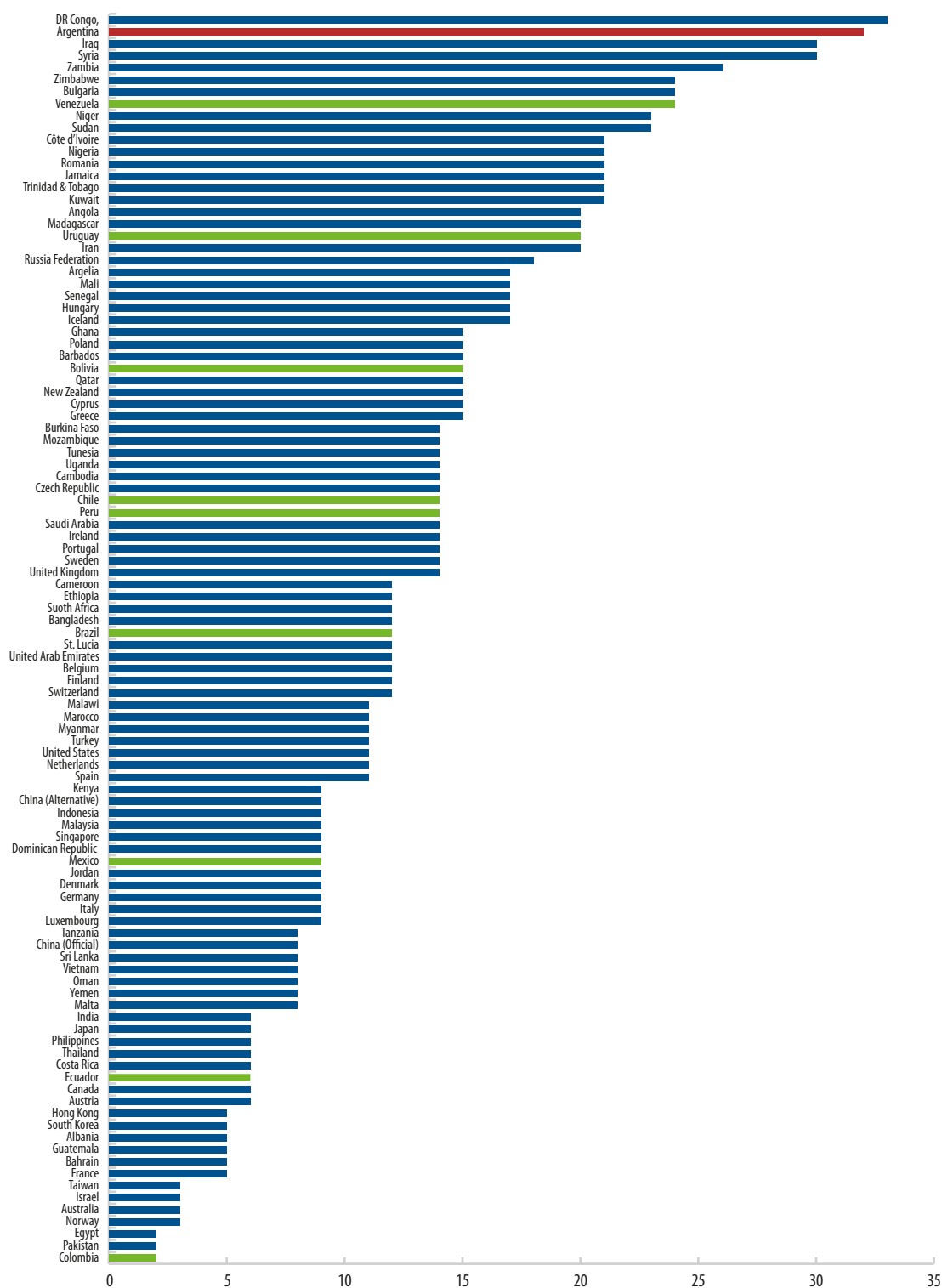
environment, reflected in large swings in economic activity (figure 1.3). During the period 1950-2016, Argentina went through 14 recessions (one or more consecutive years of negative growth), with an average duration of 1.6 years. As a result, the country spent roughly one-third of the time since 1950 in recession. This is the most time of any country in the world except the Democratic Republic of the Congo (figure 1.4), ranking with fragile states like Iraq and Syria and highly hydrocarbon-dependent countries. Uruguay, a neighboring country affected by Argentina's cycles and arguably subject to similar external shocks, spent less than one-fifth of the time in recession. Recessions not only occur often in Argentina but are also deep. In an average recession cycle, Argentina's GDP contracts 3.5 percent per year (table 1.1). The result is a relatively weak growth performance: average long-run economic growth in Argentina has been only 2.7

percent, below that of its regional peers (3.7 percent), new high-income countries (3.9 percent, see box 1.1 for a definition of this group), and Organisation for Economic Co-operation and Development (OECD) countries (3.2 percent).

What lies behind Argentina's volatile behavior? In order to answer this question, the next subsection will introduce the three aspects at the root of this dynamic: natural resources abundance, historically large middle class with unmet high-income country aspirations, and an unequal federation marked by a significant vertical imbalance. The following subsection will show, with a long-term perspective, how these three characteristics have interacted, resulting in Argentina's high volatility. Finally, the last subsection will emphasize the recent history, mainly over the last decade and a half.



Figure 1.4: Years in recession as a percentage of total years, 1950–2016



Source: Calculations based on data from the Conference Board's Total Economy Database.

Note: Argentina in red, South American countries and Mexico in green.

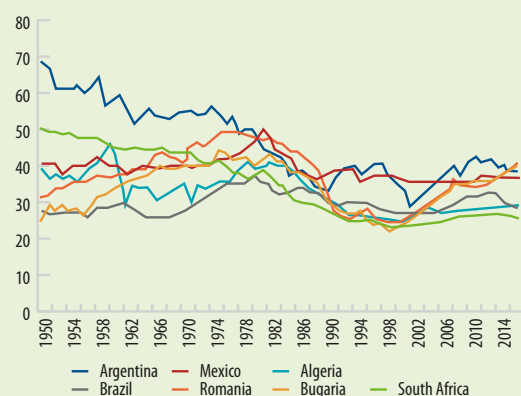


### Box 1.1: Middle income trap from above? Argentina and comparator countries

Given its secular decline from relatively high levels of income per capita, Argentina can be referred as a unique country<sup>a</sup> that did not grow but fell into middle-income status, and remained there. Following Felipe, Abdon, and Kumar (2012),<sup>b</sup> trapped middle-income countries (Trapped MICs) are defined as those that remain in the middle-income range for more than 20 years.<sup>c</sup> The countries other than Argentina that fall into this definition are Algeria, Brazil, Mexico, Romania, South Africa and Bulgaria. Among Trapped MICs, Argentina has been the richest by far in the past (see figure B1.1.1) but has also spent the most time as a middle-income country, 53 years, over 1960–2016, compared to an average of 36 years among Trapped MICs.

Although Argentina's relative decline in GDP per capita is shared with Latin American peers, some countries have managed to diverge from this trend. Chile, in particular, has managed to grow rapidly in recent decades, and Uruguay also now is classified as a new high-income country (new HIC). Argentina remained the richest economy in the southern cone until the late 1990s, when first Chile and later Uruguay overtook it. Both Chile and Uruguay are now classified as new HICs following Felipe, Abdon, and Kumar (2012): countries taking less than 20 years to move from the upper-middle-income range to the high-income range and registering a 3 percent GDP per capita growth on average since passing the middle-income threshold. By contrast, Argentina's GDP per capita average growth rate is 1.3 percent since the country last entered the upper-middle-income range (1964–2016) (see figure B1.1.2). Lower average growth in Argentina is due partly to higher economic volatility characterized by longer time periods spent in recession compared to other countries (for further discussion see the first section of chapter 2).

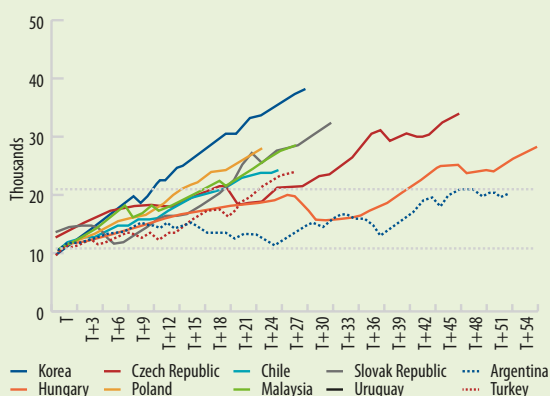
**Figure B1.1.1:** Argentina's and Trapped MIC's GDP per capita as percentage of the average of rich economies, 1960–2016 in percent



Sources: Data from the de Hoyos' Total Economy Database, November 2017; World Bank 2017a; and Felipe 2012.

Note: HIC = high-income country; PPP = purchasing power parity.

**Figure B1.1.2:** GDP per capita in Argentina and new HICs, in 2016 PPP US\$



Sources: Data from the de Hoyos' Total Economy Database, November 2017; World Bank 2017a; and Felipe 2012.

Note: HIC = high-income country; PPP = purchasing power parity.

Three comparator groups are used in the Systematic Country Diagnostic: (i) new HICs will be used as the set of structural peer countries for comparison purposes (Chile, Czech Republic, Republic of Korea, Malaysia, Poland, Slovak Republic, Turkey, and Uruguay); (ii) Argentina will also be benchmarked against the largest LAC economies (Brazil, Chile, Colombia, Mexico, Peru, and República Bolivariana de Venezuela) plus Uruguay; and (iii) OECD economies—a group of countries that Argentina aspires to join in the near future.

a. More recently, República Bolivariana de Venezuela also fell from high-income country status.

b. GDP per capita in purchasing power parity (PPP) (constant 2016 US\$) was used to create the income measure to rank countries. Income thresholds are the same as in World Bank (2017a).

c. There is an extensive literature on the middle-income trap concept, first introduced by Gill and Kharas in 2007 (see World Bank [2017a] for a survey). World Bank (2012a), for example, showed that only 13 of 101 middle-income economies in 1960 had graduated to high income by 2008.



## Argentina's defining characteristics

### Natural resource abundance

Argentina is rich in natural capital, but neglect and underinvestment hold back its potential. With 6.24 hectares per person, the country has one of the largest land endowments per capita in the world (figure 1.5). Water is also abundant at the national level, though with wide regional variations. A favorable temperate climate makes Argentina's land fertile for rainfed crop production and cattle. Argentina has one of the largest continental shelves and is rich in marine and coastal resources. It is also rich in renewable energy resources, including hydro, wind, solar and biofuels, which are largely untapped. Finally, natural diversity and landscapes attract international visitors, building a strong tourism sector that importantly contributes to GDP and job creation. Renewable natural assets are not the only resource: mineral and renewable resources are likely to play a growing role in the country's economic future. The country has world class gas and shale oil potential. Yet Argentina's development model has been depleting large portions of its natural capital base. For example, between 1990 and 2014, driven in large part by

the expansion of industrial-scale agriculture,<sup>2</sup> Argentina lost 21 percent of its forests, a loss considerably higher than the one experienced by peers (figure 1.6). This has resulted into a private gain at often high public costs (in the form of increased flooding and reduced environmental services). Moreover, soils are highly compromised: it is estimated that 37.5 percent are affected by hydraulic and wind erosion (Casas and Albarracín 2015). Also, the most productive areas (Pampa Argentina) are vulnerable to increasing trends of hydrological extremes, mainly floods. The Province of Buenos Aires alone, source of 25 percent of grain and meat production in the country, had more than 1 million hectares flooded in 2001 and again in 2015, with hundreds of millions of dollars in losses. On the marine side, naturally rich fish resources have declined through overfishing.

### A historically large middle class with unmet high-income country aspirations

By the mid-20th century, Argentina had a strong and educated middle class, full employment, and many could enjoy a standard of living not seen before. Between 1880 and 1915, the country benefitted from an abundance of

Figure 1.5: Land per capita, 2014

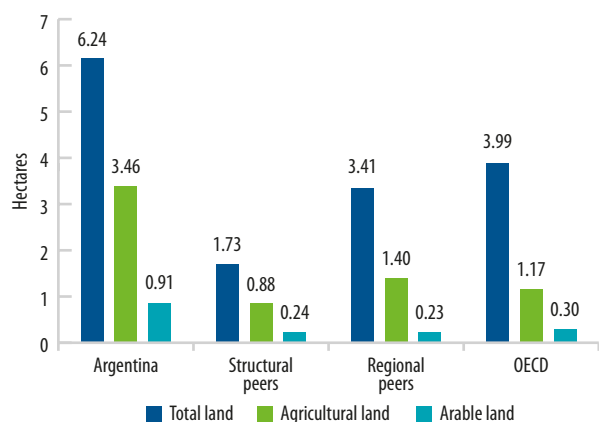
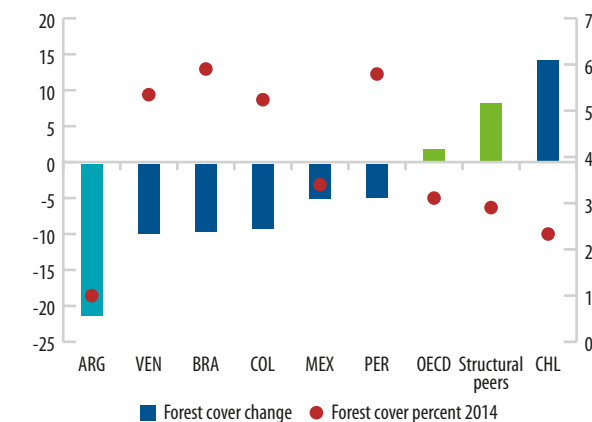


Figure 1.6: Forest cover change 1990-2014, percent



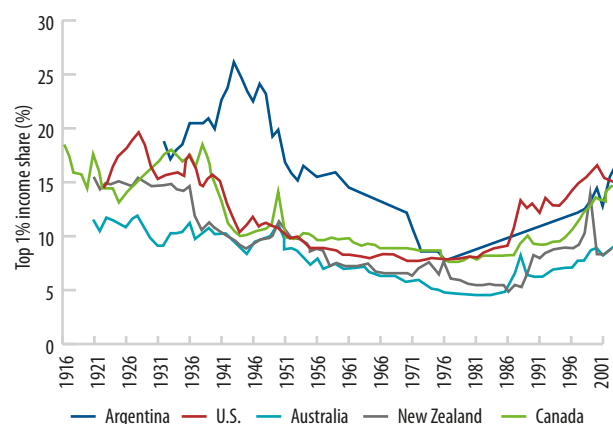
<sup>2</sup> Of course, agriculture is not just a source of negative externalities. Positive externalities and benefits arise from the fact that Argentina is a key player in global food security, and innovation in agriculture and food systems provide important global public goods.



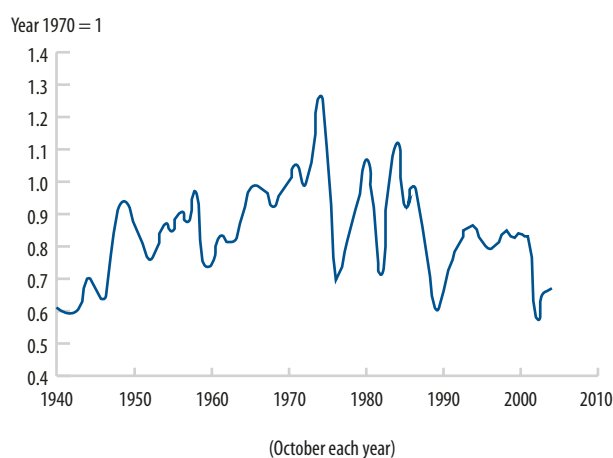
fertile land and the expansion of world trade, and land owners became increasingly wealthy because of a land policy that facilitated land concentration (Alvaredo 2010). The massive influx of immigrants, especially from Europe, dramatically changed the social structure of the country. By 1914, a third of Argentines were foreign immigrants, a large share of whom performed nonmanual work.<sup>3</sup> Favorable international trade conditions after the Second World War, combined with industrialization and redistributive policies, led to a real income increase and a rapid decline in inequality (the income share of the top 1 percent) (figure 1.7). These benign economic conditions for workers and the setting up of a welfare state led to the expansion of middle class aspirations among this newly enriched working class. In a context of full employment, the construction of a social welfare state in which most contributed ensured health care (through the trade union's *obras sociales*) and generous pensions for an increasing proportion of the population. Social security revenues as a share of GDP rose from 1.3 percent in 1943 to 6 percent in 1955 (Alvaredo 2010), real wages almost doubled from early 1940 to early 1970s (figure 1.8), and old-age coverage increased threefold (from 12.6 percent in 1950 to 44.5 percent in 1970) (Isuani and San Martino 1993).<sup>4</sup>

But the successive policy and economic shifts that led to declining real wages and the de-formalization of wage employment since the mid-1970s hit workers and deepened the segmentation of the society. The periods of negative economic growth, combined with high rates of inflation and increasing unemployment, severely impacted the once aspiring middle classes (the “new urban poor”) and the already poor, leading to a surge in inequality. The share of incomes received by the top 1 percent grew from 7.4 in 1973 to 12.4 in 1997 to 16.7 in 2004 (Alvaredo 2010). Between 1980 and 1990, workers lost 38.8 percent of their income, and the fall was even higher for those in middle class occupations (Kessler and Di Virgilio 2008). The new poor had education levels and family structures closer to those of the middle class, but low income and a lack of social security akin to those of the structurally poor. As unemployment and informality increased, a higher proportion of families lost their health and old-age insurance, increasing the duality of society between the formal/protected and informal/unprotected groups. After the 2001/02 crisis, economic growth and job creation were accompanied by an expansion in health and old-age insurance to the wider population, as well as in social safety nets. However, labor markets remain

**Figure 1.7:** The top 1 percent income shares in Argentina, and other new world countries



**Figure 1.8:** Average real wages, 1940-2006

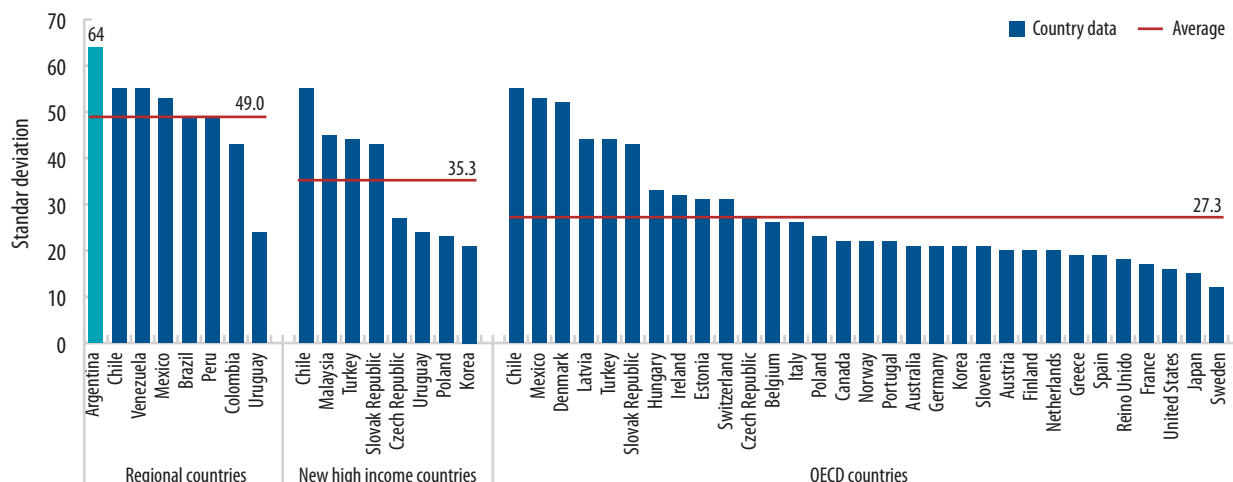


<sup>3</sup> Estimates per occupation put the size of the middle class at 30 percent by 1914 (Adamovsky 2016).

<sup>4</sup> The first estimate, using the definition of the middle class from Ferreira et al. (2013) as those with per capita income between US\$10 and US\$50 per day, puts the size of this group in Greater Buenos Aires in 1974 at almost 80 percent of the population.



**Figure 1.9:** Subnational inequality: Standard deviation of regional per capita (log) GDP, circa 2010, percent



Source: Data from Gennaioli et al. 2014.

Note: Last available data between 2001 and 2010. Argentina data for 2005.

highly segmented, with a third of workers not contributing to the social security system.

### An unequal federation marked by a significant vertical imbalance

Argentina is a very unequal federation, with areas as rich as developed nations, and provinces as poor as lower-middle-income countries. Argentina is a federal country comprising 23 provinces<sup>5</sup> and the autonomous federal capital of Buenos Aires (Ciudad Autónoma de Buenos Aires, CABA). Heterogeneity across provinces in terms of income is very large. CABA, the richest district of the country, has a GDP per capita of US\$28,358 (higher than that of Spain), whereas Formosa, the poorest province, has a GDP per capita of US\$3,704 (below that of Guatemala).<sup>6</sup> To visualize such internal discrepancies in development levels, figure 1.9 compares the standard deviation of (log) GDP per capita across subnational governments. Argentina is a clear outlier among comparator countries, with a standard deviation 30 percent higher than regional

peers, 81 percent higher than new high-income countries,<sup>7</sup> and 134 percent higher than the average OECD country.

The need to provide homogeneous services across heterogeneous provinces generates perverse expenditure and revenue collection incentives, resulting in unique fiscal challenges. Many important expenditure responsibilities lie at the provincial level, such as basic health care and education, whereas revenues are mostly collected at the national level. To help fund those expenditures, a portion of revenues is redistributed back to provinces through an automatic revenue-sharing scheme (*coparticipación*), and by discretionary transfers by the executive branch. Although some degree of mismatch between expenditure and collection responsibilities is inevitable to guarantee the provision of relatively homogeneous services, in Argentina this mismatch is very large, with a sizable discretionary component. In 2016, the average province collected only 37 percent of its revenues, and in only six provinces own tax collection represented more than 50 percent of revenues. Although, on average, transfers

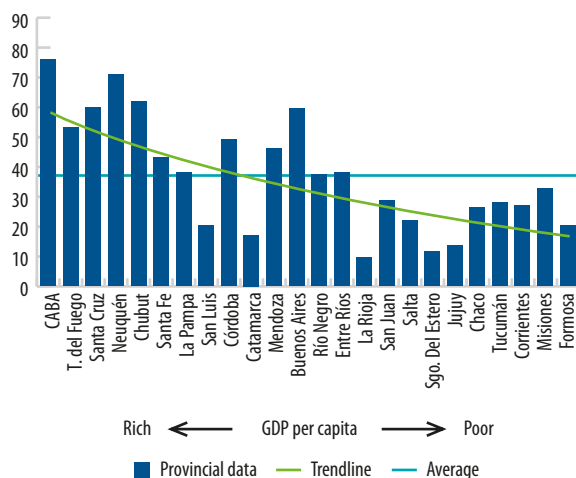
<sup>5</sup> According to the 1853 Constitution, each province has its own constitution, generating different institutional designs and administrative structures.

<sup>6</sup> Values for 2005 (the latest year for which provincial GDP is available) in PPP constant 2014 US\$ (Gennaioli et al. 2014).

<sup>7</sup> For an explanation on the choice of comparator countries, please refer to box 1.1.



**Figure 1.10:** Provincial revenues as percentage of total revenues, 2015



Source: Data from Ministry of the Treasury, Argentina.  
 Note: CABA = Ciudad Autónoma de Buenos Aires.

do serve redistributive purposes, with poorer provinces receiving a larger share of their revenues from the federal government, there are also large deviations (see figure 1.10). The revenue-sharing arrangement is the source and outcome of a very unique political economy, where governors continuously lobby for transfers from the federal government, and the federal government needs the support of governors to pass laws in the senate. As a result, many important decisions are negotiated on a short-term basis, resulting in a proexpenditure, antitax collection bias at the subnational level. Although other federal countries like Brazil, Colombia, and Mexico also show high levels of expenditure decentralization, Argentina's larger heterogeneity and high degree of vertical fiscal imbalances make it an outlier (Tommasi, Saiegh, and Sanguinetti 2001).

## Convergence postponed

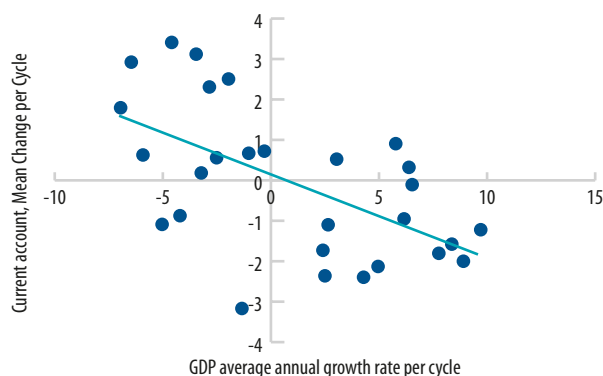
Taken together, these three features of Argentina have combined in deleterious ways to result in a long-term disappointing economic performance. The high-income aspirations of a country with middle-class ambitions

and the short-term considerations (*cortoplacismo*) of the political system combine to create enormous pressures to spend during booms. Often it is the booming agricultural sector that provides the high rents to the state to fuel these fiscal expansions. The large vertical imbalances of the federal system and the tendency of political and economic actors to reach agreements through short-term “deals” have undermined the ability of public institutions to enforce long-term commitment to reforms and to sustainable policies to use the country's rich natural assets to harness growth. This has frequently led to highly procyclical economic policies that amplify booms and busts. Successive crises have deepened this dynamic: growing impoverishment during downturns leads to high pressures to spend when economic conditions improve, and actors have over time lost their trust in the ability of the economy to deliver long-term stable growth, reducing their incentive to look beyond short-term gains. As a result, Argentina has failed to keep up with rich economies and has experienced an unusually volatile macroeconomic environment, reflected in large swings in economic activity.

One of the main explanations behind Argentina's disappointing macroeconomic performance lies in its tendency to “live beyond its means,” an endogenous driver of its boom-and-bust cycles. The country's social demands and political pressures yield an equilibrium characterized by excessive aggregate spending (that is, aggregate dissaving). The dissaving of the country as a whole is financed with savings from the rest of the world, reflected in a current account deficit. The tendency to overspend grows wider in booms, with procyclical policies that result in consumption and investment (both public and private) growing faster than income. On the external sector this is reflected in an increase in imports through two channels. First, imports rise because of an increase in the demand for imported consumption goods and production inputs. Second, a growing aggregate demand puts pressure on the market for nontradable goods, increasing their relative price, a real appreciation that further increases imports. Because exports—mainly based on natural resources and held back by an extractive fiscal regime—usually fail to keep up with the rapid growth of



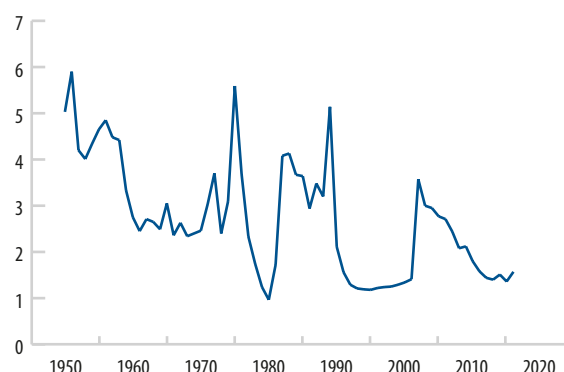
**Figure 1.11:** Correlation between current account as a percentage of GDP and GDP growth, 1950-2016



Sources: Data from Ferreres 2005, Instituto Nacional de Estadística y Censos, and Banco Central de la República Argentina.

Note: Each dot is a period of consecutive growth or contraction of economic activity, in percentage (x axis), and the corresponding change in the current account balance, in percentage points of GDP (y axis), all expressed in annual averages.

**Figure 1.12:** Real exchange rate index, 1950-2016



Source: Banco Central de la República Argentina.

Note: A real depreciation of the peso is an increase in the index.

imports, the current account deteriorates. This process usually comes to an end when the rest of the world refuses to continue to finance Argentina's current account deficit, and usually results in a sharp depreciation of the currency, a spike of inflation, a large drop in real wages, and a deep recession that reverts the current account and wipes out a large portion of the welfare gains in the expansion period. These boom-and-bust episodes in turn result in both underinvestment in natural capital (which takes time to reap rewards) and in extractive policies to generate short-term liquidity (generating the liquidation of assets and even illegal extraction). These cycles, sometimes referred to as "stop-and-go cycles" are illustrated in figure 1.11 showing the correlation between current account balance and GDP growth.<sup>8</sup> As the economy grows and the current account deteriorates, the external restriction starts to bind, and usually results in a sharp depreciation of the real exchange rate (RER). After a period of appreciation, the RER usually sharply depreciates, as shown by the spikes in figure 1.12. These large depreciation episodes triggered large contractions in economic activity. Defining large depreciation episodes as those where the exchange rate

depreciates in one year by more than one standard deviation, there were five such episodes since 1950 that resulted in contractions in economic activity, usually large, with a decline on average of 5 percent per episode (table 1.2).<sup>9</sup>

Fiscal policy is a key factor behind Argentina's tendency to overspend. The equilibrium is usually driven by—or channeled through—its public sector, which runs chronic fiscal deficits and conducts procyclical policies. On average, the consolidated (federal plus provincial) fiscal deficit since 1960 was 4.2 percent of GDP, with only five years (from 2003 to 2007) of fiscal surplus (see figure 1.13). The surplus years were not the result of countercyclical policies, but an anomaly as the consequence of a massive crisis, a decade-long default, and extraordinarily high commodity prices. In fact, Argentina failed to join a group of LAC countries that, despite a history of procyclical fiscal policies, were able to conduct countercyclical policies in the 21st century (see figure 1.14). One of the main sources of procyclicality is the inability of the political system to manage the country's so-called distributional conflict, a situation where the demands by different interest groups

<sup>8</sup> For an historical account of stop-and-go cycles, see for example, Diaz Alejandro (1970), xviii and 549, or the more recent Gerchunoff and Llach (2007), Heymann (2007), Albrieu and Fanelli (2008), and Gerchunoff and Rapetti (2016).

<sup>9</sup> This does not include the most recent exchange rate depreciation episode in 2018.



TABLE 1.2. LARGE DEPRECIATION EPISODES, 1950–2016, PERCENT

Year	RER Depreciation	GDP Growth Rate
1975	81	-0.6
1981	78	-0.4
1982	137	-3.2
1989	61	-6.9
2002	153	-10.9
Average	102	-5.4

Source: Calculations based on data from Ferreres 2005 and Banco Central de la República Argentina.

Notes: A large depreciation is defined as a depreciation above one standard deviation. RER = real exchange rate.

(unions, businesses, professional councils, and soon) exceed the available resources, with the corresponding pressures over fiscal policy (see Heymann and Navajas 1989 for a classic exposition). The unequal federalism contributes to this distributional conflict—this time between provinces and the national government. The macroeconomic consequences of procyclical fiscal policies and the resulting fiscal imbalances are varied, but three mechanisms are of first-order importance. First, procyclical fiscal policies contribute to the real appreciation process described above, both on the real side (increased public expenditure puts pressure on the markets for nontradable goods, raising their relative price) and on the financial side (the inflow of borrowed dollars appreciates the nominal exchange rate). Second, the need to finance increasing fiscal deficits fuels Argentina's recurrent debt problems. Third, fiscal deficits are the main cause of Argentina's chronic inflation problems because the monetary authority continuously acts as a lender of last resort to the federal government.

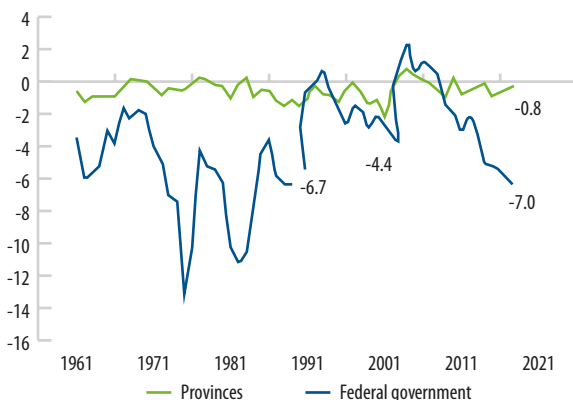
Institutionally, these cycles are reflected in the large swings in economic policy throughout the country's history. Among some of the most significant in the last quarter century: The country moved from a very rigid exchange rate regime (currency board established in 1991) to a managed float, then a dual exchange rate

regime, and now has a flexible exchange rate. Trade was to be gradually opened up when Mercosur was created in 1991, but the strategy was left behind and reversed to the extent that by 2012 import controls were put in place. The privatization of public utilities in the 1990s turned to nationalizations from the mid-2000s onward and is now replaced by a focus on public-private partnerships. Argentina has moved from a “mostly free” economy in 1995 to a “mostly unfree” one in 2017, according to the Index of Economic Freedom.<sup>10</sup> Tax legislation has been enacted or modified more than 80 times since 1988. Fiscal federal rules have been changed 14 times in the same period, and budgetary rules have been altered 16 times between 1992 and 2008 (Bonvecchi 2010). Table 1.3 gives an overview of policy reversals across varied areas between the 1990s and the 2000s. Historically, policy volatility has typified Argentina for longer than the last quarter century. Using a measure of policy stability based on presidential speeches during 1940–2016 (Calvo-González, Eizmendi, and Reyes 2018), Argentina and República Bolivariana de Venezuela come out with the lowest policy stability and were the countries that most diverged in economic output from the United States over 1940–2010 (figure 1.15). Given this history, commentators today focus on the expectation of a strong possibility that the current direction of economic policy may be reversed in Argentina if political power shifts.

10 The Index of Economic Freedom covers 12 freedoms, ranging from property rights to financial freedom, in 186 countries. According to the 2017 Index of Economic Freedom, Argentina ranks 156 out of 186 countries (see <https://www.heritage.org/index/>).

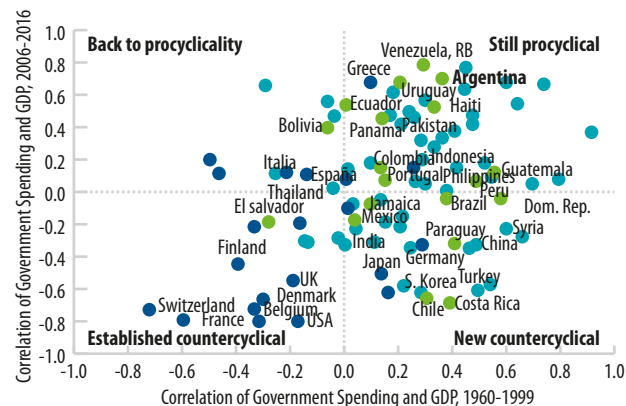


**Figure 1.13:** Fiscal balance, Argentina, 1960-2016, in percent of GDP



Source: Data from Ministry of the Treasury, Argentina.

**Figure 1.14:** Correlation between public expenditure and GDP, 1960-2016



Source: Reprinted from Vegh et al. 2017.

In turn, successive crises lead actors to lose their trust in the ability of the economy to deliver long-term stable growth as noted earlier, reducing their incentive to look beyond short-term gains. It increases volatility as growing impoverishment during downturns leads to high pressures to spend when economic conditions improve. This also implies that growth patterns become increasingly reliant on changes in factor accumulation and utilization rather than higher productivity (a shift in the production function).<sup>11</sup> Since 1960, the contribution of total factor productivity (TFP) has been erratic, decreasing in three of the last six decades for an average of zero growth, compared to a 0.6 percent average annual growth rate in OECD countries and new HICs.<sup>12</sup> The contribution of capital, large in the 1960s and 1970s has been decreasing: the capital-to-GDP ratio fell by on average 15 percent since the 1980s.<sup>13</sup> Stagnant TFP, coupled with a strong decline in the capital intensity ratio, resulted in relatively low labor productivity growth—as low as 2 percent on average in the 1980s (see chapter 2 for a discussion of productivity trends).<sup>14</sup>

Recurrent crises and successive policy swings resulted in worsening welfare conditions from the mid-1970s to early 2000s. Slow and unstable growth, deep political conflict, sweeping trade liberalization, and labor repression in the mid- to late 1970s are associated with increasing poverty and inequality (figure 1.16) (Altimir 2001; Gasparini and Cruces 2009). The hyperinflation, real depreciation, and economic contraction of the 1980s resulted in even greater decline in real wages and rising labor informality (Beccaria 2007), leading to rising levels of poverty. The following decade, although the economy was growing, and inflation was under control, the sudden liberalization of trade along with an appreciated RER led to a rise in unemployment and informality, especially among unskilled workers. In the absence of wide compensatory social protection programs and weak labor institutions, this rise led to a more unequal distribution of incomes and an increasingly segmented society between the haves and have-nots (Cicowicz 2002; Galiani and Sanguinetti 2003; Gasparini and Lustig 2011). This situation

11 As a result, real appreciation during the “stop-and-go” cycles is not offset by productivity gains, making the RER much more volatile.

12 Moreover, the positive contribution of TFP to growth for Argentina in the 2001–10 period is likely overestimated given the effect of the commodity price supercycle on measured TFP.

13 Because of data limitations for the whole period, capital is not adjusted by capital utilization, so its contribution could be overestimated, as shown in BCRA (2017).

14 Although data for Argentina are not available, Brandt, Schreyer, and Zipperer (2017) suggest that the poor performance of TFP may be lower than indicated. The authors show that TFP growth, after accounting for natural capital as a factor of production, is sometimes overestimated in times of natural resource booms.



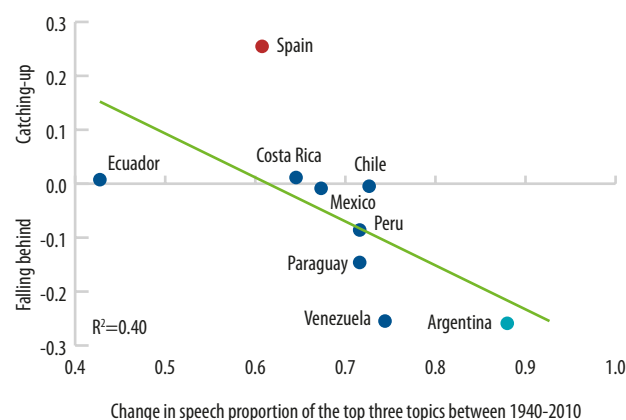


TABLE 1.3. ECONOMIC POLICY MAKING: A HISTORY OF POLICY REVERSAL

1990s	2000s
Independent central bank (1991)	New Central Bank Charter (2012)
Currency Board (fixed exchange rate) (1991)	Managed float with official and parallel markets (post-2001 crisis)
Fiscal Solvency Law (1999)	Central Bank Financing of Deficit institutionalized (2012)
Pension Reform (individual accounts/AFJPs) (1994)	Pension system “unification” (public sector) (2008)
Labor Reform (2000)	New Labor Reform (revokes the 2000 law) (2004)
Founding Member of WTO (1995)	Import restrictions (“G3” complaint filed at WTO) (2012)
Privatizations: e.g. Telephone, airline, road concessions (1990); Railway concessions (1991); Water and sanitation concession (1992); electricity companies (Edenor, Edesur), gas company (1992); Oil company (YPF) (1993); Postal service (1997); Provincial banks and provincial enterprises (various)	Nationalizations: Airline (2008); Railway (2015); Water services in GBA (2006); Oil company (YPF-Repsol) (2012)
Price deregulation	New Supply Law (2014)

Source: Reprinted from Rosenblatt 2016.

Figure 1.15: Policy volatility and convergence with the U.S. GDP per capita, 1940-2010



Source: Calvo-González, Eizmendi, and Reyes 2018.

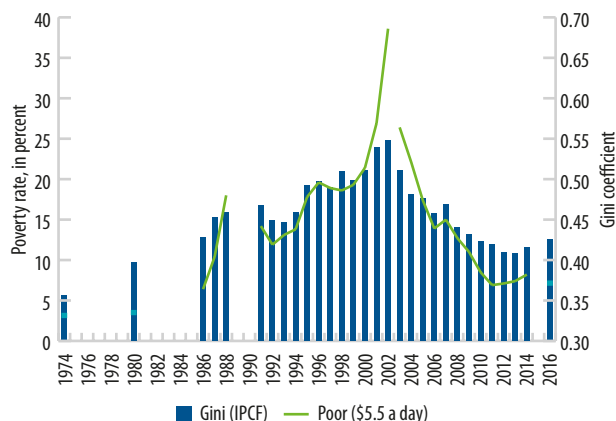
Note: This figure shows the cross-country correlation between long-term growth and policy volatility during the 1940–2010 period. Long-term growth is measured as the percentage point change of the GDP per capita of each country (as a percentage of the GDP per capita of the United States). Policy volatility is measured as the percentage point change of the share of the top three topics in the presidential speech of the initial year. The topics were selected by a Latent Dirichlet Allocation model using pooled data of all the countries, and using a 10 percent minimum threshold to discard topics with low frequencies.

worsened toward the end of the decade, when a recession finally led to the end of the convertibility regime in 2001/02, accelerated inflation, and saw poverty reach its highest level in Argentine history. After the drastic crisis, employment conditions improved, particularly among the less qualified. However, as macro unbalances accumulated, labor market improvement slowed down and poverty stagnated.

Despite improvements in the past 15 years (see chapter 3 for details), Argentina still faces significant challenges in terms of poverty and shared prosperity. According to official estimations, 30.3 percent of Argentines living in urban areas are poor and 6.1 percent are unable to meet basic food needs (2016, second semester).<sup>15</sup> Measured at US\$5.50 per capita per day in 2011 PPP (the upper-middle-income country poverty line), Argentina's poverty rate is significantly lower than that of its regional peers (figure 1.17). However, it is still higher than it was 40

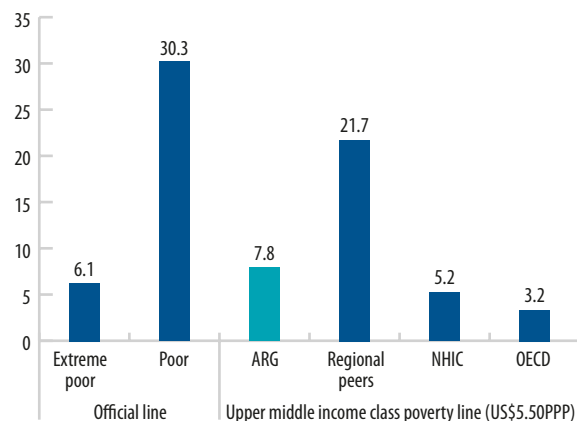
<sup>15</sup> Latest official poverty estimations for 2017 (second semester) show that poverty rates for the 31 agglomerations have declined to 4.8 percent for extreme poverty and to 25.7 percent for total poverty. Although comparisons across time—beyond 2016—are challenging, experts estimate that these rates are the lowest in the past 15 years. To maintain time comparability with international statistics, we choose to report in the main text the 2016 figure.

**Figure 1.16: Poverty and inequality in Greater Buenos Aires, 1974-2016**



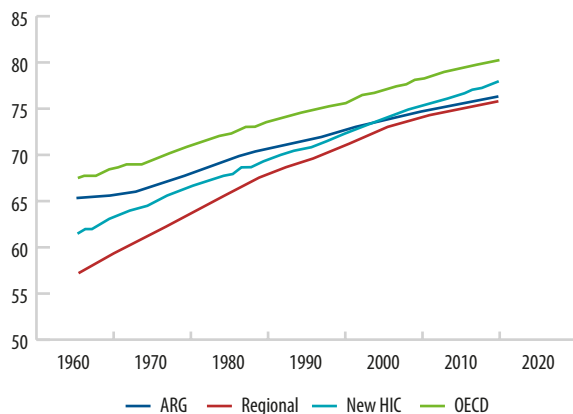
Source: Calculations based on data from SEDLAC (CEDLAS and World Bank), based on Encuesta Permanente de Hogares-Continua.

**Figure 1.17: Income poverty rate, circa 2016, in percent**



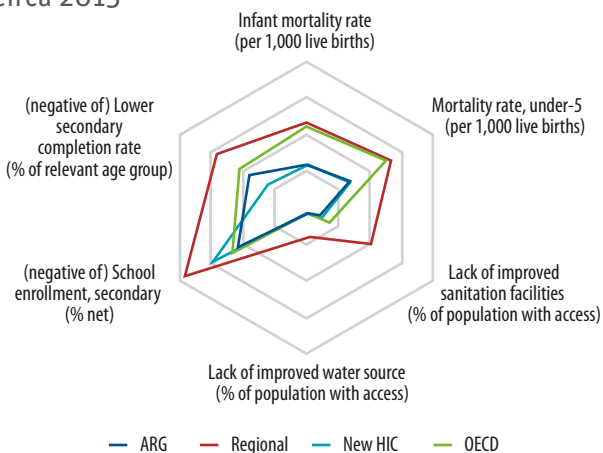
Source: Data from Instituto Nacional de Estadística y Censos for official estimates, and World Development Indicators and SEDLAC for internationally comparable estimates. Note: For groups of countries, simple averages are presented. NHIC = new high-income countries; OECD = Organisation for Economic Co-operation and Development.

**Figure 1.18: Life expectancy at birth (years), 1960-2015**



Source: Data from the World Bank's World Development Indicators. Note: For groups of countries, simple averages are presented. New HIC = new high-income country; OECD = Organisation for Economic Co-operation and Development.

**Figure 1.19: Non-monetary welfare dimensions, circa 2015**



Source: Data from the World Bank's World Development Indicators. Note: For groups of countries, simple averages are presented. New HIC = new high-income country; OECD = Organisation for Economic Co-operation and Development.

years ago, and is now 50 percent higher than in the new HICs and almost two and a half times higher than in OECD countries. In addition, a substantial proportion of the population is vulnerable to poverty should they be hit by economic shocks (see box 1.2).

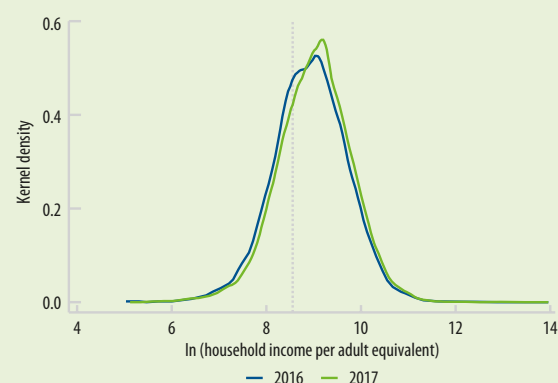
Although Argentina managed to reach OECD standards in some dimensions of well-being, successive economic

crisis affected performance in other cases. The country has reached similar levels in access to improved water, but is still far from the OECD standards in terms of infant mortality, the under-five mortality rate, and life expectancy. Life expectancy improvements deaccelerated, diverging from new HICs and OECD countries trend and, after thirty years, instead becoming similar to the performance of regional peers (figure 1.18). The quality of Argentina's

### Box 1.2. Vulnerability to shocks: Potential impact on poverty rates

At the end of March 2018, the *Instituto Nacional de Estadística y Censos* announced the new estimates for poverty and extreme poverty, showing relatively large declines, surprising some observers. Most of the complementary indicators—from both the labor market and the main public transfer—were consistent with this improvement, and thus, qualitatively, this was to be expected. Overall employment increased (faster for informal and independent workers), and wages in the formal sector grew at a higher pace than the value of poverty baskets (27 percent compared to 22 percent). Similarly, the total amount of pensions, as well as contributory and noncontributory family allowances grew faster than inflation. Still, a decline of 4.6 percentage points in poverty rates from 30.3 percent (2016) to 25.7 percent (2017) was larger than expected. In part, this is the result of the shape of the distribution relative to the poverty threshold. By the second semester of 2016, a sizeable share of Argentines had incomes very close to the poverty line (figure B1.2.1). On average, a 10 percent increase in real household income was enough to move down the poverty rate 5 percentage points (table B1.1.1).

**Figure B1.2.1:** Kernel distribution of household income per adult equivalent (in logs), 2016 and 2017, second semester



Source: Calculations based on data from *Encuesta Permanente de Hogares-Continua* 2016 and 2017 (second semester).

**TABLE B1.1.1. SIMULATION OF EFFECTS OF FALLING AND INCREASING PER CAPITA REAL INCOME ON OFFICIAL POVERTY AND EXTREME POVERTY RATES, 2017, SECOND SEMESTER**

	Extreme Poverty	Poverty
20% less	7.1	35.5
15% less	6.5	32.6
10% less	5.7	30.1
5% less	5.1	27.6
Current rate	4.8	25.6
5% more	4.2	23.6
10% more	3.9	22.0
15% more	3.5	20.4
20% more	3.2	18.6

Source: Calculations based on data from *Encuesta Permanente de Hogares-Continua* 2017 (second semester).

The other side of the coin is that currently a relatively large fraction of households is vulnerable to falling back into poverty even with slight changes in economic conditions. For example, inflation usually has a higher impact on people in the lower tail of income distribution because it tends to affect the purchasing power of the poor more than that of those at the top, resulting in increased poverty and inequality (Easterly and Fischer 2001; Panigo et al. 2016). If real incomes of families living just above the value of the basic basket of goods and services (poverty threshold) were to decline, the direct impact on the poverty rate would be sizeable. Estimates suggests that, if prices grew 5 (10) percent faster than per capita household incomes, the official poverty rate would increase by 2 (4.5) percentage points relative to the last observed rates (2017, second semester). In this context, having a well-targeted cash transfer program with efficient delivery mechanism, such as the AUH, can potentially allow the government to respond quickly to mitigate the impact of a negative shock among the most vulnerable families.



education system, once seen as the top performer in Latin America, has eroded and converged to the median in the region. For example, Argentina placed second in reading scores among third graders in Latin America and the Caribbean at the end of the 1990s (in the United Nations Educational, Scientific, and Cultural Organization's first regionally-comparable measurement), but fell to the regional average in the latest round (Cassasus et. al. 1998, 2014).

## The challenge going forward

The opportunity for Argentina to develop is there: it is a closed economy with large parts of the nonagricultural sector locked in low productivity and, currently, noncompetitive activities. The divide between the two Argentinas—globally competitive firms and workers enjoying rich country conditions contrasted with a large part of the population with low skills and poorer quality of life, often in the informal sector, that is much more vulnerable—puts at risk the country's convergence. Investing effectively in people so they can take up better-quality jobs, and ensuring access to better services and social protection, is critical to narrowing these divides. The country can piggyback on its natural capital base. Rather than adopting extractive policies, however, it can create the conditions for nature-based industries that sustainably exploit the country's fertile lands, forests, renewable energy sources, and touristic assets.

The long-run decline in relative GDP per capita has been mirrored by a lack of gains in aggregate and labor productivity. Growth patterns have become increasingly reliant on changes in factor accumulation and utilization rather than higher productivity (a shift in the production function). The contribution of TFP has been erratic, negative in three of the last six decades (see figure 1.20), for an average of zero growth since 1960, compared to a 0.6

percent average annual growth rate in OECD countries and new HICs.<sup>16</sup> The contribution of capital, large in the 1960s and 1970s has been decreasing. Stagnant TFP, coupled with a strong decline in the capital intensity ratio resulted in relatively low labor productivity growth, as seen in figure 1.21—as low as 2 percent on average in the 1980s.

Increases in labor and capital accumulation and utilization are a must for income convergence with advanced economies. The labor force is not projected to shrink because of aging until the 2040s. But the opportunity exists to increase the current participation rate of women, youth, and those with low skills. However, there are worrying indications that skills are falling behind relative to new HICs and OECD peers, and there is no time to waste in prioritizing improving educational outcomes and building a culture of learning in the workplace. Investment is critical to support growth; however, currently it is about 16 percent of GDP, well below in the new HICs, where investment is on average close to 24 percent of GDP. The severe underdevelopment of domestic capital markets limits the ability to invest: loans to the private sector in Argentina are only 14.4 percent of GDP versus the LAC average of 42.7 percent.<sup>17</sup>

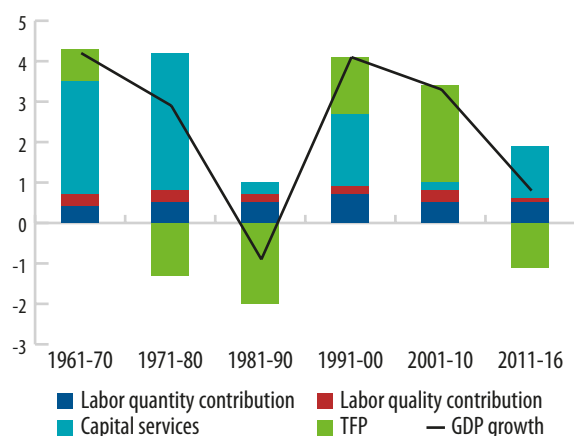
Although there is space for growth based on capital accumulation and job creation, increasing productivity will be critical for convergence to advanced country income levels. A requisite for productivity growth is to achieve macroeconomic stability by establishing a macroeconomic and institutional setting that allows for a reduction of the primacy of fiscal policy. Reducing economic distortions and increasing domestic competition is required to reallocate resources across sectors: investors rank Argentina 137th out of 138 countries in openness to domestic and foreign competition. Integration into global markets would spur productivity growth by creating conditions and incentives for better functioning of markets and more efficient use of resources. Argentina stands out for how closed off it

16 Moreover, the positive contribution of TFP to growth for Argentina in the 2001–10 period is likely overestimated given the effect of the commodity price supercycle on measured TFP.

17 Competition data come from the World Economic Forum (2017). Investment data are from the World Bank (2016), and domestic capital market development data are from the IMF (2015).

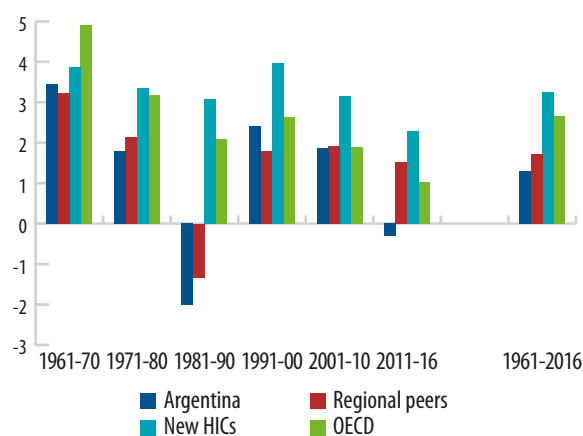


**Figure 1.20: Growth decomposition by decade, annual averages, 1961–2016, percent**



Sources: Data from Banco Central de la República Argentina and the Conference Board's Total Economy Database.

**Figure 1.21: Labor productivity annual average growth rate, 1961–2016, percent**



Sources: Data from Banco Central de la República Argentina and the Conference Board's Total Economy Database.

is from the global economy: it is the fourth-most closed economy in the world, with total trade to GDP just ahead of Sudan, Pakistan, and Brazil and only one free trade arrangement (FTA) in place. Continuous productivity gains, the ultimate driver of sustained shared prosperity, cannot be achieved in such a closed setting. On the structural side, there is also a large productivity agenda in improving firm management practices and innovation investment and adaption. A precondition for this is to ensure the country has a highly skilled (and malleable) labor force.

The duality of the economy presents a challenge to ensure all households gain from opening up the economy and is an obstacle to productivity growth itself. Close to a third of workers are informal, meaning they are more vulnerable to income shocks because they do not qualify for social insurance. Informality also means that workers are less likely to benefit from employer-provided training. Exclusion of workers from the formal economy also presents a challenge to the political support for transition to an outward-looking growth model: a social contract is more likely to form if there is a growing middle class with clear gains from change. There is also a dual economy for agricultural producers and firms engaged in services and manufacturing, with highly productive enterprises

that can compete globally alongside low-productivity producers and firms. Finally, geographical areas across Argentina differ greatly in their capacity to benefit from exports, investment, and increased domestic competition.

But this is not enough because sustaining shared prosperity over time will require productive and sustainable use of the country's assets. The first asset is human capital. Enhancing equity of opportunities will be key to guarantee that nobody is left behind in the transition to the new development model. As mentioned above, this is particularly challenging given the dual nature of the Argentine economy and will require active policies, where investment in human capital needs to be center stage. But the country also needs to invest in a more sustainable use of traditionally underinvested natural capital, such as forests, renewable energy, and tourism resources. Investment in the country's nature-based comparative advantage can generate employment and rents. This should include, but is not limited to, the acknowledgment of the negative effects of deforestation, aquifer depletion, and the state of depletion of a large share of agricultural soils, the most important source of rents for the country. Effective management of the adverse consequences of global warming and its heterogeneous social and geographical impact will need to play a greater role.



## Pathways to shared prosperity

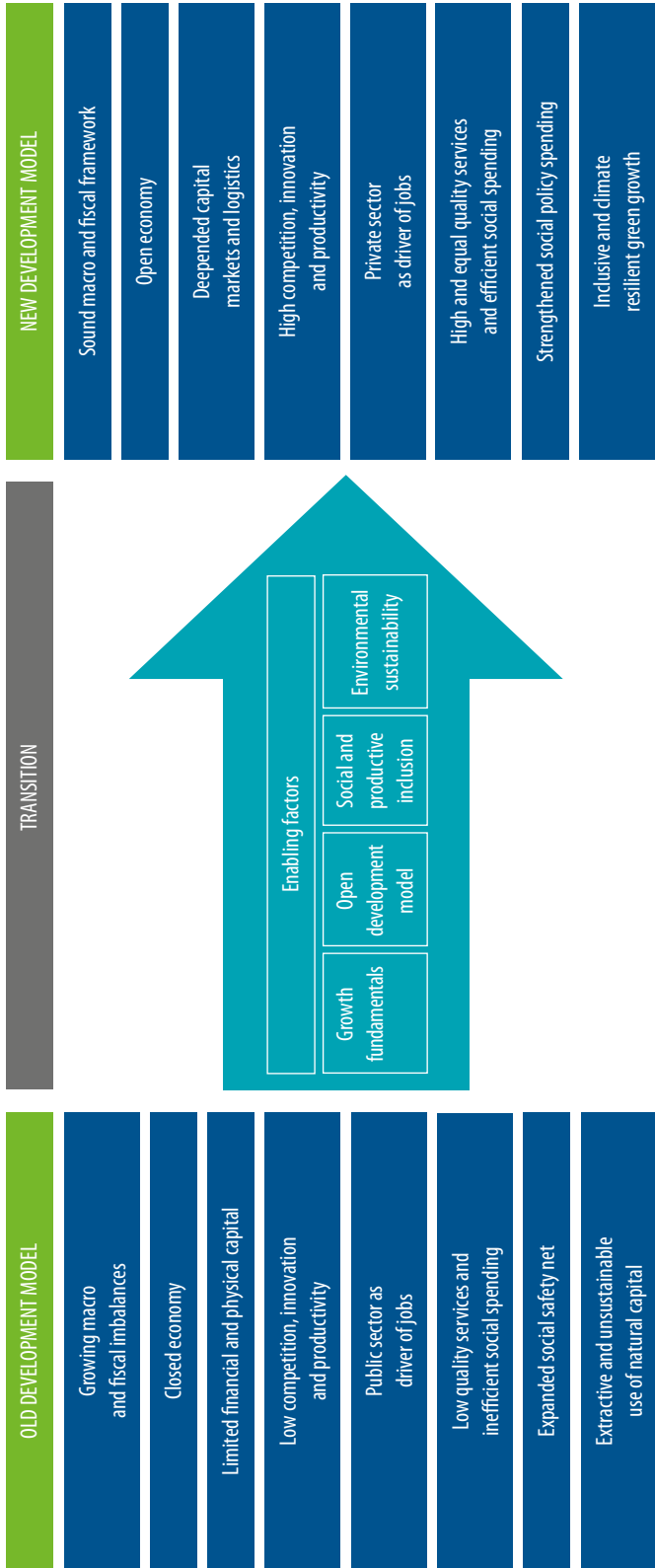
The development model that Argentina needs to reach centers on achieving sustained growth by opening up the economy and putting in place the conditions for private sector growth. This SCD identifies four pathways where progress is critical for sustainable growth and an expansion of shared prosperity. Without sound macroeconomic management that brings price stability and a fiscally sustainable path, the transition to a new development model will founder. Pathway 1 concerns putting in place these fundamentals for growth. Economic growth in Argentina has come to rely on domestic demand and largely on the expansion of government spending. The country has begun the move to a more open, outward-oriented development model. Pathway 2 looks at the necessary supporting policies. Low investment, very undeveloped capital markets, and large physical investment needs have to be tackled. Reducing barriers to trade is only part of the story: the economy has to open up to domestic and international competition, and the highly concentrated market power that some firms enjoy has to be reduced. For success, a larger group of firms will have to build the capacity to export and compete in a more competitive domestic market.

For the change to a new economic model to endure, growth will have to translate into better quality jobs, and the progress made on reducing poverty will have to continue. Pathway 3 outlines the constraints that will have to be overcome to ensure that everyone reaps the benefits from a changed economic model. Success will entail bringing in more people to the labor market and increasing their productivity. Of concern, then, is the evidence that the population is falling behind in relative terms on educational outcomes—not a good sign for a country that needs to reverse its lagging economic performance and expand its middle class. Additionally, sustained and inclusive growth will require that everyone, irrespective of socioeconomic background or geographic location, has access to quality services needed to accumulate assets. In the shorter term, it will also be important to enhance the extent to which social safety nets and active

labor market policies can mitigate the negative social impacts of reducing market distortions and opening up to domestic and international competition in the transition period. Furthermore, integrating all of Argentina (and not just the richer areas) into the world economy will be important to expand the gains from opening up and making the economy more productive. Finally, pathway 4 outlines how protecting the environment and harnessing the value of nature for development will be essential to ensure the sustainability of economic growth. The policy priorities are outlined in the final section. The transition to new sources of growth for development in Argentina then involves a large and wide-ranging set of policy reforms (see figure 1.22 for an illustration of the transition needed). Many reforms in these areas have already started (see box 1.3 for further details).



Figure 1.22: Argentina’s economic transition



Source: SCD team.



### Box 1.3. Summary of key policy shifts and structural reforms, 2016–18

#### Normalization of international relations

- The IMF conducted its first Article IV consultation in a decade in November 2016. Argentina will hold the World Trade Organization Ministerial Conference in 2017 and the Group of 20 Presidency in 2018.
- After 15 years, Argentina returned to international capital markets with the largest single bond issuance in history for an emerging country (April 2016).

#### Main reforms

- **Monetary policy:** The Central Bank formally adopted an inflation-targeting regime with a floating exchange rate. In addition, it committed to gradually decrease financial assistance to the central government.
- **Statistics:** Since January 2016, the credibility of the National Statistical System has been restored; as a result the IMF lifted its Declaration of Censure on Argentine official statistics (November 2016).
- **Export and imports:** Export taxes were eliminated, with the exception of soybeans, which were reduced and for which the government announced a scheduled further reduction. An imports administration system replaced the mostly discretionary licensing regime in place until 2015. Foreign exchange controls were lifted after four years.
- **Subsidies:** Energy, water and transport subsidies were reduced while keeping a social tariff for low income users in water and transport and creating a social tariff for residential electricity and natural gas consumers. Energy subsidies will continue to decrease gradually until they are eliminated by 2019, with the exception of social tariffs.
- **Taxes:** The personal income tax floor was raised, and family allowances were expanded to reach 4.1 million children, up from 2.9 million. A successful tax amnesty program was implemented to encourage repatriation of undeclared funds held abroad, resulting in additional revenues of 1.6 percent of GDP. Recently, a capital gains tax was implemented for the first time.
- **Pension system:** Argentina's pension system accounts for 40 percent of the national budget. In December 2017, Congress approved a change in the pension indexation formula in line with international practice, and put in place the Universal Pension for the Elderly.
- **Competition:** A new competition law, which modernizes the regulatory framework for antitrust policy, including setting up a new authority with greater independence, introducing a leniency program for cartel-agreements (such as price-fixing), improved sanctioning rules for anti-competitive practices and a more efficient merger control system, was passed by Congress on May 9, 2018.
- **Capital markets:** A new Capital Markets Law, which modernizes the regulatory framework for capital markets, including by enhancing corporate governance, expanding the supply of financial assets, and targeting the widening of the domestic investor base, was passed by Congress on May 9, 2018.
- **Public-private partnership framework:** Congress approved a new public-private partnership framework to help address the country's existing infrastructure deficit and to stimulate private investment in key sectors of the economy such as infrastructure, housing, services, production, applied research, and technological innovation (November 2016).
- **Transparency:** President Macri declared his target of placing Argentina among the top countries in the world in terms of transparency. These efforts include the Access to Information Law that became effective in September 2017, the passing of the Corporate Criminal Responsibility Law to fight corruption in





November 2017, ongoing reforms in procurement for public infrastructure and public procurement, and a renewed commitment for open government with the open data portal and the implementation of the second open government action plan.

- **Fiscal pact:** Long-standing disputes over transfers between the national government and the provinces were settled in a fiscal pact of November 2017. Provinces agreed to freeze current public expenditures in real terms and to decrease the burden of the highly distortive provincial turnover taxes.
- **Public employment:** The government enacted a voluntary separation scheme at the federal level to rationalize the public wage bill (April 2018). The program targets older employees from the national administration and government agencies.

#### Reforms under discussion on structural agenda

- **Labor market reform:** Informal labor accounts for one-third of salaried employed workers. The government is discussing a labor market reform with the aim of providing incentives for formalization.
- **Trade:** Argentina is one of the most closed economies in the world. Trade reform needs to be carefully designed because a significant portion of labor is employed in protected sectors. Trade discussions between Mercosur and the European Union have resumed. The Pacific Alliance accepted Argentina as an observer member.
- **Education:** Argentina has high school dropout rates and low learning outcomes. The government made important strides in moving evaluation to the center of debate, but further reforms are needed.

# CHAPTER 2

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# GROWTH

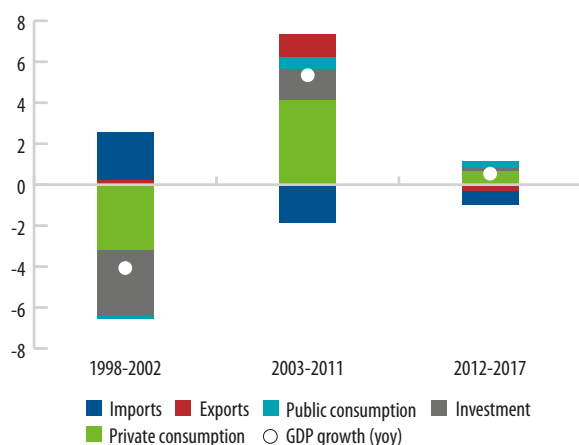
## Drivers of economic growth

The aftermath of the 2001/02 crisis was an opportunity to address Argentina's recurrent macroeconomic imbalances and set the basis for long-term growth. The collapse of the Convertibility Regime and default on foreign obligations resulted in a massive real depreciation of the peso, a sizeable output gap, low wages, and a large fiscal surplus. In a context of expanding world demand and increasing commodity prices, the Argentine economy recovered vigorously, growing 5.9 percent, on average, between 2003 and 2011.<sup>1</sup> But this was further fueled by expansionary fiscal and monetary policies to support high levels of private consumption (see figure 2.1). The continued expansion of aggregate demand was met by increased intensity in the use of labor and capital, and by some productivity gains, mostly explained by a recovery from the large fall in 1998–2002 (see figure 2.2).

By 2011, the demand-driven growth strategy showed signs of exhaustion, with macroeconomic imbalances becoming self-evident. General government expenditures had increased at an unprecedented pace, growing by over 11 percentage points of gross domestic product (GDP) between 2004 and 2011 to fuel mostly current expenditures on subsidies, pensions, and wages. Increased tax pressure failed to keep up with expenditures, leading to a rapid deterioration in the fiscal position that turned a 3.3 percent consolidated surplus in 2004 to a 7.8 percent deficit in 2016. Growing fiscal imbalances put pressure on the real exchange rate and current account, which moved to deficit for the first time in almost a decade. To tackle external imbalances the government turned to protectionist policies such as quantitative restrictions on foreign trade and foreign exchange markets, hurting productivity.

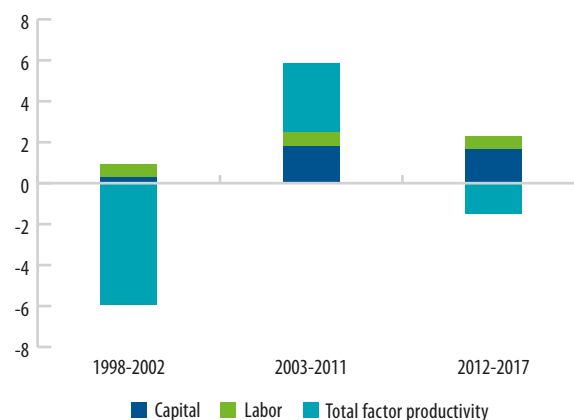
Macroeconomic imbalances grew wider in the years after 2011, following the deepening of the policies that generated them in the first place. In 2011–15, private job creation almost stalled. Government expenditure continued to grow beyond historical records, productivity collapsed, and the current account deficit widened. The lack of access to international credit markets translated

**Figure 2.1:** Growth decomposition by demand component, period year averages, in percent



Sources: Data from Ministry of Treasury, Argentina, and the World Bank's World Development Indicators dataset.

**Figure 2.2:** Growth contributions by factor of production, period year averages, in percent



Sources: Data from Ministry of Treasury, Argentina, and the World Bank's World Development Indicators dataset.

<sup>1</sup> Geometric average, including the 2009 recession due to the international financial crisis.



into a growing monetization of fiscal deficits, which further fueled inflation. The economy thus entered an annual cycle of recessions and expansions, with real GDP a mere 2.5 percent higher in 2017 than in 2011, a fall if measured in per capita terms.

With increasingly protectionist policies and a continuous real appreciation of the peso, the tradable sectors' share of GDP fell. Export taxes, high import tariffs, low competition, discretionary import licenses, and quotas in currency markets combined to reduce the share of tradable sectors in output, despite favorable commodity prices and external conditions. Industries that produce goods, such as agriculture or manufacturing, grew by less than half the rate of the service sectors in the 2004–16 period (25 versus 57 percent). As a result, the share of goods-producing sectors in GDP (at producer prices) decreased by 12 percentage points—from 44 to 32 percent. The share of services grew from 56 to 68 percent in the same period.<sup>2</sup>

The expansion of nontradable sectors—such as construction, health services, or public administration—resulted in a misallocation of employment to low-productivity activities. The high growth of these sectors since 2004 is due not only to the continuous real exchange rate appreciation but also to deliberate policies to protect some sectors perceived as being major contributors to job creation, especially for low-skilled workers. These high-growth sectors have also experienced low productivity growth, (see figure 2.3), a sign that productivity in the high-employment growth sectors has failed to catch up with the influx of workers. Unless those sectors had relatively high productivity to begin with, which is not the case,<sup>3</sup> this points to a misallocation of employment to low-productivity uses.<sup>4</sup> This misallocation is a source, and a result, of low aggregate growth. Low growth results in low job creation, which in a context of a growing labor

force (demographic bonus) leads to some sectors needing to absorb the increase in the labor force, typically public administration or public education. This vicious cycle generates a trap of low productivity, low job creation, and growing labor misallocation.

Low capital depth and shallow financial markets are other sources of low productivity. Since 2004, the capital-to-output ratio is on average 15 percent lower than in the 1980–2004 period. This reflects the permanent negative shock of the 2001/02 crisis on credit markets, and its impact on investment: the private credit-to-GDP ratio fell from an average of 22 percent in the two decades prior to the crisis to an average of 13 percent since (World Bank 2017g). Lack of trust in the domestic financial system is also reflected in the fact that Argentine residents held a large share of their wealth offshore. Wealth held abroad by Argentine residents is estimated at 35 percent of GDP, the fourth-largest among large economies, after major oil-exporting countries (see figure 2.4). President Macri put in place a tax amnesty for the disclosure of undeclared assets that lasted from July 2016 to March 2017. Although assets worth over a fifth of GDP were declared (US\$116.8 billion), this policy did not induce nationals to repatriate these assets: about US\$93 billion of the assets disclosed continue to be held offshore.

In a challenging macroeconomic environment, the productivity and productive capabilities of Argentina's firms barely improved over the past two decades. According to the World Enterprise Surveys for 2010 and 2017, labor productivity at the firm level fell an average of close to 6 percent in those years. Moreover, an economic fitness analysis, which measures the underlying capabilities that support a country's productive structure, shows Argentina has experienced fitness losses in several mid- and high-complexity industries (such as electrical equipment, transportation, and petroleum/

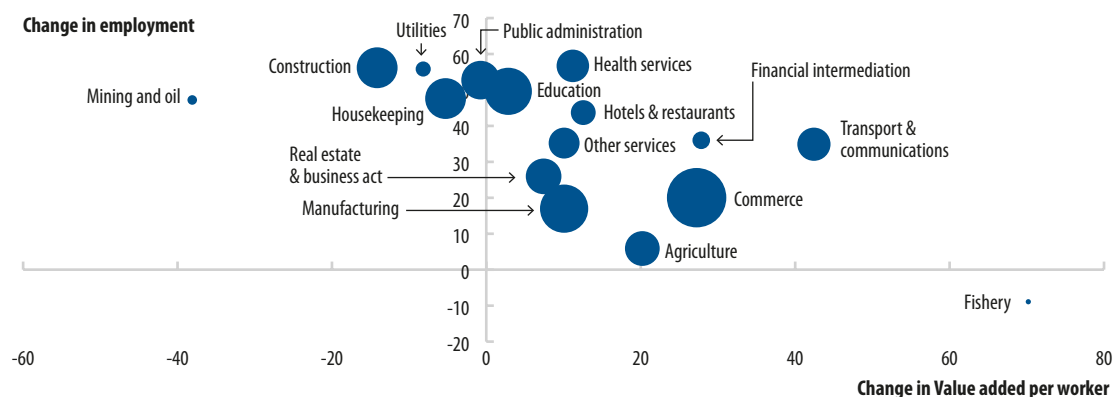
<sup>2</sup> Shares in current prices. In constant 2004 prices, the share of the service sector increased 5 percentage points.

<sup>3</sup> The sectors with highest value added per worker in 2004 were mining and oil, fishery, and financial intermediation, in that order.

<sup>4</sup> A full assessment of the extent of resource misallocation in Argentina is not possible because of serious data limitations, so these findings should be taken with caution. For example, (i) value added per worker is an imperfect proxy for marginal productivity, especially for sectors such as public administration; (ii) sectors are defined rather broadly (with no disaggregation within manufacturing, for example), and (iii) 2004 is not the best baseline year. Nevertheless, figure 2.3 illustrates an important point: the reallocation of workers to more productive sectors will be key to ignite productivity growth.

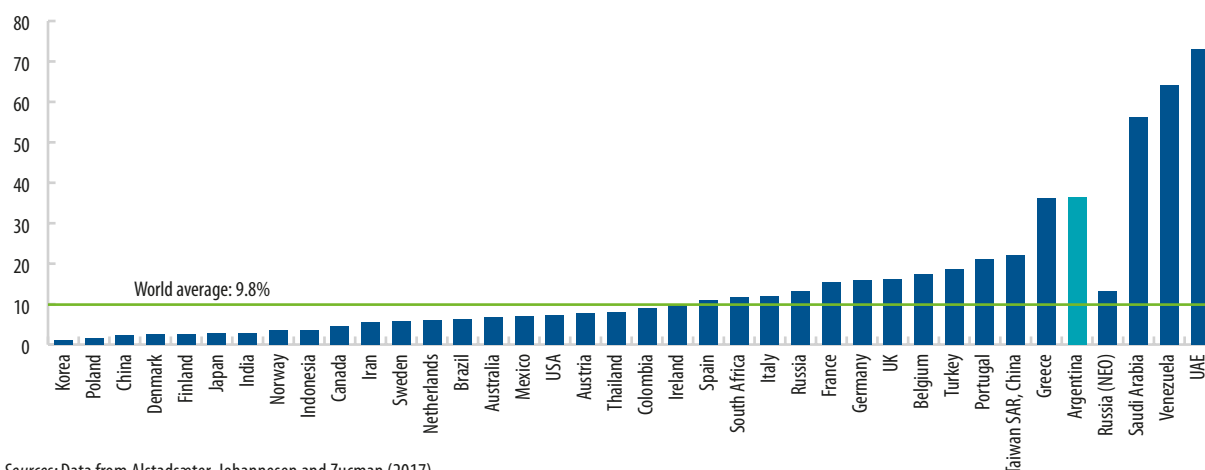


**Figure 2.3:** Change in value added per worker and change in employment by sector, 2004-2016, in percent



Source: Calculations based on data from *Instituto Nacional de Estadística y Censos*.  
Notes: Bubble size represents employment in 2016. Includes formal and informal employees.

**Figure 2.4:** Offshore wealth, 2007, in percent of GDP

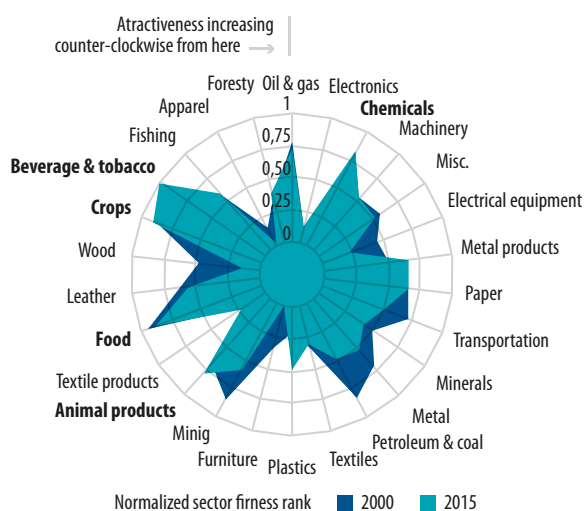


Sources: Data from Alstadsæter, Johannessen and Zucman (2017).  
Note: All countries with a GDP of greater than US\$200 billion in 2007.

coal processing). Since 2000, Argentina's fitness has increased only marginally and in very few sectors (mainly in metal products and plastics; see figure 2.5). On the GDP-fitness plane, Argentina's position is close to that of Brazil and the Russian Federation (see figure 2.6). Because of the high correlation between economic fitness and GDP, diversification and capability upgrading in the areas of strongest fitness such as chemicals, crops, animal products, and food/beverages provide potential opportunities for further GDP growth.

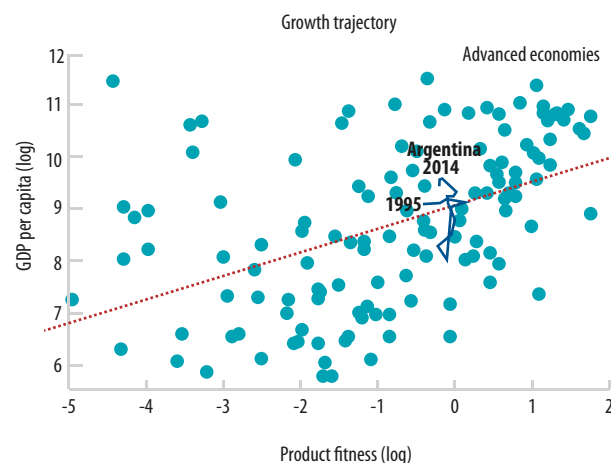
With Argentina in need of more firms that export, innovate, and diversify their production, recent policy measures are starting to have impact. More than 80 percent of firms in Argentina are micro and small firms. However, most formal employment is generated by the few large firms. The Argentine economy is characterized by a high concentration of production, both geographically—in Buenos Aires Province, the Autonomous City of Buenos Aires (Ciudad Autónoma de Buenos Aires, CABA), Santa Fe, Cordoba, and Mendoza—and in terms of production

Figure 2.5: Product fitness for 2000 and 2015



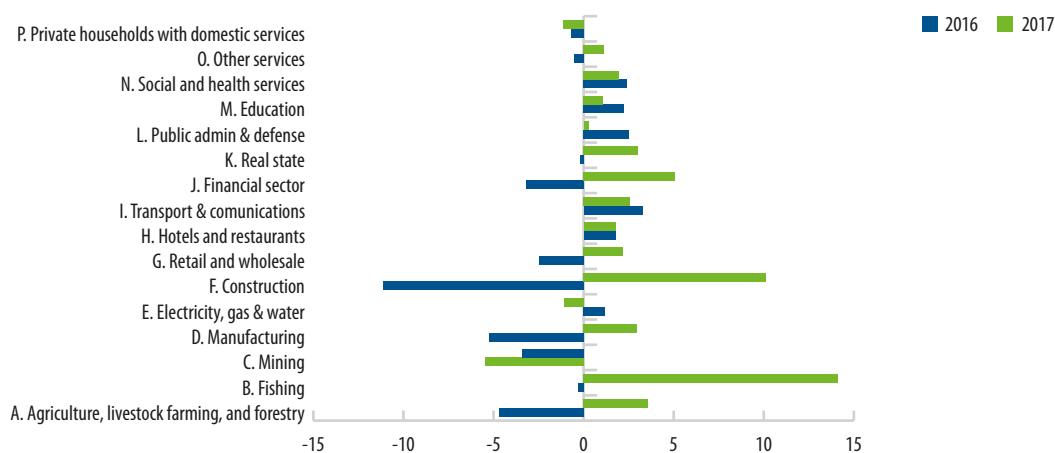
Source: Reprinted from Roster and Cader (2018).

Figure 2.6: Correlation between product fitness and GDP per capita, 1995-2014, in logs



Source: Reprinted from Roster and Cader (2018).

Figure 2.7: GDP annual growth rate, by sector, 2016 and 2017, percent



Source: Data from Instituto Nacional de Estadística y Censos.

sectors, with retail businesses, agriculture, and light manufacturing accounting for the bulk of production. Although the total number of firms has slightly declined since 2013, net firm creation for all sizes of firms has been positive for the last two years. Firm entry has exceeded firm exit across the firm size distribution. Although few firms manage to grow sustainably—after five years, most

existing micro, small, and medium-sized firms continue to be classified in the same category—the “graduation rate” of firms into higher firm size categories has increased continuously over the last three years. This slow recovery is mirrored by the small proportion of fast-growing firms, those that generate most new private employment.<sup>5</sup> Since 2006, the number of exporting firms has fallen.

5 Data from the government's dataset on business, GPS Empresas, Ministerio de Producción, Secretaría de Transformación Productiva, Subsecretaría de Desarrollo y Planeamiento Productivo, available at <http://datos.gob.ar/dataset/siep-gps-empresas>.



Only during the last two years has this trend stopped and started to reverse, with exports increasing on both the extensive margin (new firms entering) and the intensive margin (more exports by existing exporters). Exporting firms are the only type of firms seeing an increase in employment according to the World Bank's latest Enterprise Survey (2017).

For a successful transition to a new development model, Argentina needs to generate the macroeconomic conditions and conduct the structural transformations to allow firms to thrive. Macroeconomic conditions include sound fiscal and monetary policies to reduce volatility, and expenditures and revenue policies to promote growth, which include important institutional reforms. New sectors and firms can emerge as sources of sustained growth—provided barriers to investment, trade, and competition are removed. Recent growth has come mainly from services, agriculture and fishery, and construction, which is growing at the fastest pace in a decade (figure 2.7). Imports of machinery and capital goods have been growing. Employment growth is coming mostly from tourism—in hotels and restaurants.

## Pathway 1: Putting in place the institutional and macroeconomic fundamentals for growth

### Macroeconomic stability: Moving beyond boom-bust cycles

The use of fiscal and monetary policies as a buffer against rather than as an amplifier of economic shocks is of first-order importance to avoid boom-and-bust cycles. Macroeconomic mismanagement, in the form of procyclical fiscal and monetary policies, has been a main driver of Argentina's excessive macroeconomic volatility (see, for example, Buera, Navarro, and Nicolini 2011). Procyclical international capital flows and low domestic financial market depth exacerbate the problem.

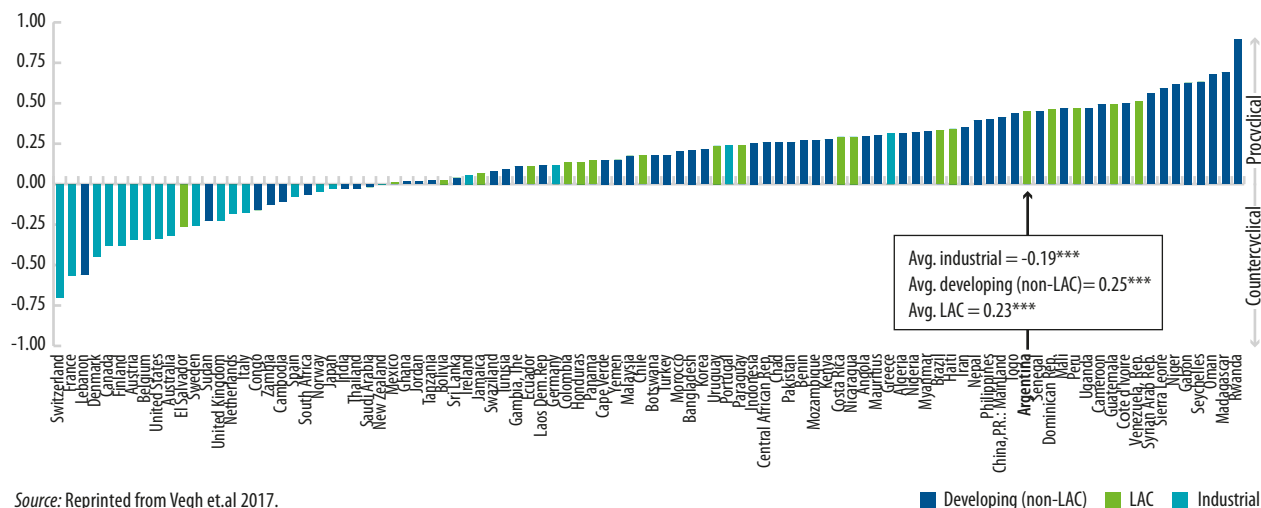
These repeated boom-and-bust episodes have been accompanied by big changes in the economic context and shifts in policies, undermining confidence in the long-term performance of the economy and the credibility of policy makers.

Fiscal policy in Argentina has been highly procyclical throughout its history, even by the standards of Latin America and the Caribbean (LAC), a procyclical region. Over the last 60 years, LAC countries and most developing economies have had procyclical fiscal policies (see figure 2.8). Argentina is among the most procyclical economies in LAC (fifth), above the regional average. Fiscal procyclicality usually results from the combination of political pressures to spend in good times and the inability of emerging economies to borrow in bad times.

In contrast to most of its LAC peers, Argentina's fiscal policy has become even more procyclical in the last 15 years. Most LAC countries improved fiscal management over that period, as they learned from experience and implemented sounder fiscal policies in the context of favorable external conditions. Although more than 90 percent of LAC countries carried out procyclical fiscal policies during 1961–99, 60 percent continued to do so between 2000 and 2016. Furthermore, though still positive, the average LAC correlation coefficient went down from 0.24 to 0.13 after the year 2000. This was not the case of Argentina, where the correlation between (the cyclical component of) GDP and government expenditure increased from 0.35 to 0.72. The increase in fiscal procyclicality is true even excluding the 2001/02 crisis and its aftermath. Overall, Argentina became the second most procyclical country in LAC since 2000, after República Bolivariana de Venezuela. If the analysis takes into account fiscal multipliers, the procyclicality of fiscal policy becomes even more worrisome. Although there is no agreement about its magnitude in developing and emerging economies, there is evidence that long-run fiscal multipliers are as large as 1.3 or 1.4 in closed economies like Argentina.<sup>6</sup> This implies that procyclical fiscal policies greatly amplify the economic cycle.

6 Long-run multiplier estimates of Ilzetzki, Mendoza, and Vegh (2011) using a Structural Vector Autoregression Approach (SVAR).

**Figure 2.8:** Correlation between cyclical component of real government expenditure and real GDP, 1961-2016



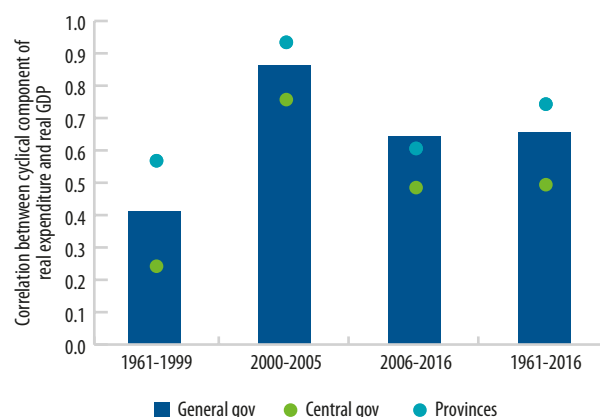
Source: Reprinted from Vegh et.al 2017.

Federal expenditure drove the increase in fiscal procyclicality, but it is still higher at the provincial level. Although fiscal procyclicality at the provincial level is high, it has remained relatively stable before and after the 2001/02 crisis (see figure 2.9). All provinces have procyclical public expenditures except for Neuquén, which is rich in hydrocarbons. There are reasons to believe that subnational governments should be less countercyclical than the federal government, which ultimately bears the burden of macroeconomic stabilization (see, for example, Musgrave and Musgrave 1989; Oates 1972, 1999). However, the high fiscal procyclicality at the provincial level results largely from institutional design: significant spending decentralization processes in the 1970s and 1990s led to large vertical imbalances, funded by procyclical revenue transfers from the federal government. The narrow access to alternative financial sources translates procyclical transfers at the federal level into procyclical policies at the provincial level. The overall increase in fiscal procyclicality has, however, been driven by federal government expenditures, whose correlation coefficient more than doubled from 0.24 in 1961–99 to 0.49 in 2006–16.

Recurrent transfers have been the main driver of the increase in fiscal procyclicality, whereas pensions and wages have

historically been the most procyclical subcomponents of fiscal policy. At the federal level, pensions not only are the biggest expenditure item in the budget but also have contributed the most to fiscal procyclicality since 1961 (figure 2.10). However, the increase in procyclicality in the last decades has been driven by wages, capital expenditure, and especially transfers (mainly energy and transport subsidies). At the provincial level, the dynamic was more uniform across expenditure items (figure 2.11).

**Figure 2.9:** Fiscal Procyclicality by level of government, 1961-2016

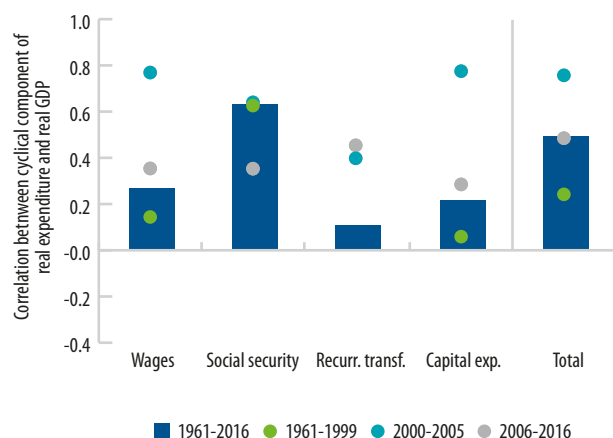


Source: Calculations based on data from the Ministry of Treasury, Argentina.





**Figure 2.10: Fiscal procyclicality by subcomponent, federal government, 1961-2016**

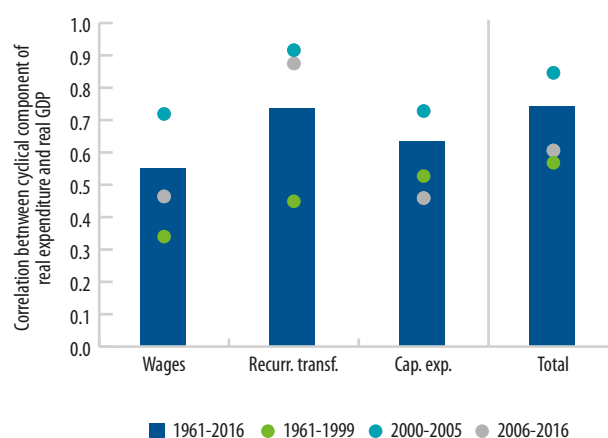


Source: Calculations based on data from Ministry of Treasury, Argentina.

Nonetheless, recurrent transfers to municipalities (mainly to finance municipal wages) not only contributed most to provincial procyclicality but also increased the most after the year 2000.

Monetary policy has also been an amplification mechanism for macroeconomic shocks. Argentina has the third most procyclical monetary policy in LAC. The main source of monetary procyclicality in Argentina has been fiscal procyclicality, with the Treasury using the Central Bank as a regular source of financing for its continuous deficits, as will become clear in the next subsection. However, monetary policy has also been an independent source of macro instability. The 2004–08 period of fiscal surplus is a good example of procyclical monetary management not driven by fiscal considerations. In that period, countries of South America were subject to similar real appreciation pressures due to the commodity price boom. Real exchange rates (RERs) appreciated to a similar order of magnitude across countries—11.6 percent on average (see figure 2.12).<sup>7</sup> Depending on monetary policy, real appreciation can materialize either through a nominal exchange rate appreciation or an increase in domestic

**Figure 2.11: Fiscal procyclicality by subcomponents, provincial government, 1961-2016**



Source: Calculations based on data from Ministry of Treasury, Argentina.

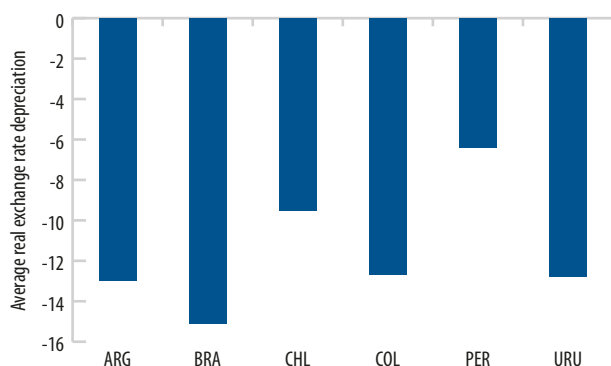
inflation. All countries except for Argentina took the first path, which resulted in single-digit inflation (5.1 percent on average). Argentina instead used monetary policy to prevent the peso from appreciating in nominal terms. As a result, real appreciation was met by a large increase in prices, 14.6 percent on average (see figure 2.13).

Macroeconomic management to temper Argentina's unusually volatile cycle is thus a precondition for sustainable growth. Argentina needs to build fiscal space in good times to be able to run countercyclical fiscal policies in bad times. To this end, the role of automatic stabilizers in the federal budget should be heightened, and institutional arrangements such as the establishment of sovereign wealth funds could be evaluated once fiscal pressures ease. At the provincial level, the procyclicality of public expenditure is tied to the nature of transfers to provinces from the federal government. The recently enacted Fiscal Pact, which increases provincial financial autonomy and establishes spending rules at the provincial level, is an important step. Alternatives such as the establishment of a countercyclical fund across provinces could help them share risks to smooth out regional shocks.

<sup>7</sup> The RER is defined as  $\frac{E \cdot P}{P^*}$ , where  $E$  is the nominal exchange rate (local currency unit per US\$),  $P$  is the U.S. consumer price index, and  $P^*$  is the domestic consumer price index. A real appreciation is a decrease in  $\frac{E \cdot P}{P^*}$ .

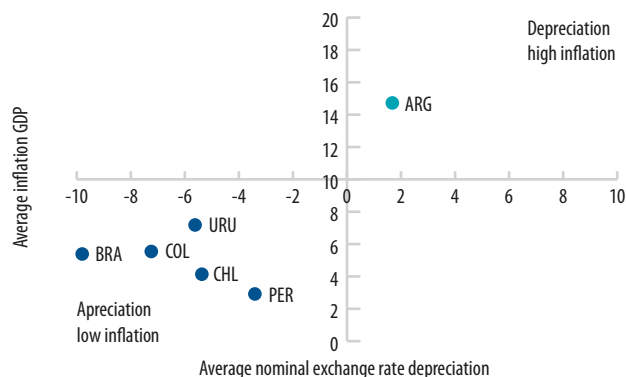


**Figure 2.12:** Real exchange rate depreciation, 2004-2008, percent



Sources: Calculations based on data from the World Bank's World Development Indicators.

**Figure 2.13:** Nominal exchange rate depreciation and inflation, 2004-2008, annual averages, percent



Sources: Calculations based on data from the World Bank's World Development Indicators.

On the monetary side, a consensus on the importance of an independent monetary authority is a prerequisite for countercyclical monetary policies.

### Expenditure and revenue policies to support growth

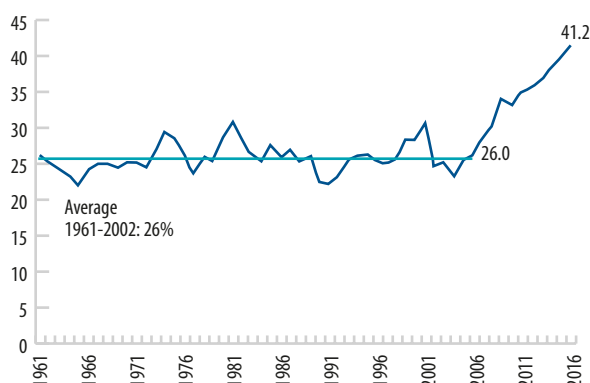
An improved fiscal framework is needed to reduce economic distortions and better support growth. A significant increase in the size of the public sector, such as the one experienced in Argentina in the last decade, has economic effects that go beyond fiscal sustainability concerns. First, it increases real appreciation pressures, which results in a reallocation of resources away from traded and into nontraded, often unproductive, sectors. Second, it crowds out the private sector, increasing the returns to rent-seeking activities and diverting effort and talent from more productive endeavors. In a resource-constrained environment, it also diverts financing from the private sector, given the large returns that can be made on sovereign bonds. Third, given the relatively high level of informality, increased fiscal pressure on the formal sector becomes substantial, which limits the amount and scope of potentially profitable projects and might reduce incentives toward formality. Moreover, larger public expenditure did not translate into a more efficient provision of public services or better infrastructure. It

instead concentrated on current expenditures such as pensions or energy subsidies, which do little to enhance productivity and, in the case of subsidies, can disrupt the functioning of strategic sectors. On the revenue side, the large increase in the tax burden was not based on a sound and progressive expansion of the tax base but relied heavily on emergency and distortionary taxes.

The public sector in Argentina expanded at an unprecedented pace over 2006–16 because of an expansion in public employment and wages, and spending on pensions and subsidies. Although Argentina's overall public sector has represented historically about 26 percent of GDP—the period average over 1961–2006—public sector expenditure reached 41.2 percent of GDP in 2016. Public spending grew 15.2 percentage points of GDP between 2006 and 2016 (see figure 2.14). This expansion was concentrated on current spending (rise of 15.4 percent of GDP), but capital expenditure (remaining at about 3.7 percent of GDP, just 1 percent higher than the 1990s average) did not benefit from this expenditure boom. The large rise in public spending is due to a large increase in public employment and wages (increase of 4.1 percent of GDP), a strong increase in pensions (social security spending rose by 4.5 percent of GDP), and a significant increase in energy and transport subsidies (transfers to private sector increased by 3.8

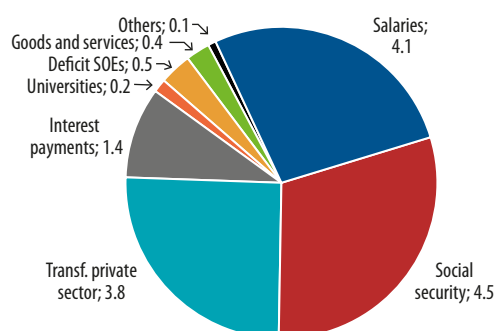


**Figure 2.14:** Public expenditure, general government, 1961-2016, percent of GDP



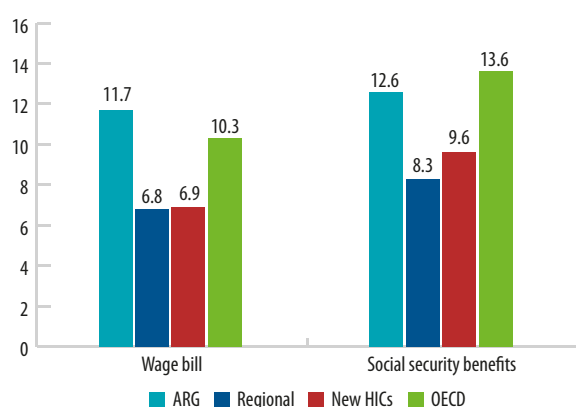
Source: Calculations based on data from the Ministry of Treasury, Argentina.

**Figure 2.15:** Total expenditure increase, 2007-16 by component, percent of GDP



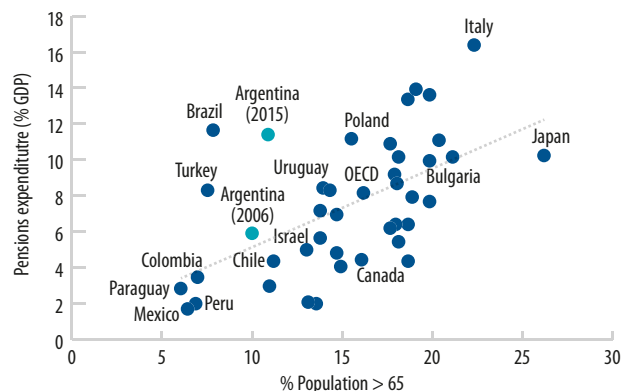
Source: Calculations based on data from the Ministry of Treasury, Argentina.

**Figure 2.16:** Public spending comparison on selected items, 2015, percent of GDP



Sources: Data from the Ministry of Treasury, Argentina; IMF; and OECD.

**Figure 2.17:** Pension expenditure in percent of GDP, and share of population older than 65 years of age, circa 2015



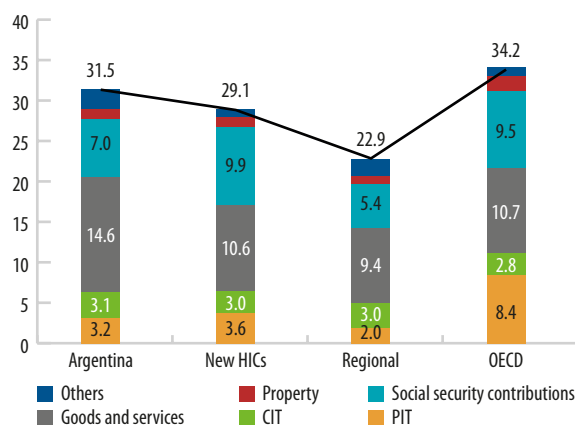
Source: Data from the Ministry of Treasury, Argentina; IMF; and OECD.

percent of GDP) (see figure 2.15). Pension spending rose because of an expansion in coverage—the incorporation of noncontributory pensioners to the system for an almost universal coverage—and to the introduction of an automatic indexation mechanism in 2009 that resulted in large increases in real earnings for pensioners.

After a large expansion in the last decade, Argentina's public spending on salaries and social security benefits is higher than in most of its comparators: the wage bill

in Argentina is close to 12 percent of GDP, almost double the averages for the region and for new high-income countries (new HICs), and higher than the Organisation for Economic Co-operation and Development (OECD) average. Expenditure on social security, which increased because of an expansion in pension coverage and a generous new indexation scheme, is higher than regional and new HIC averages, but still below OECD levels (see figure 2.16). Pension spending as a share of GDP (11.3 percent) is among the highest in the world, higher than in

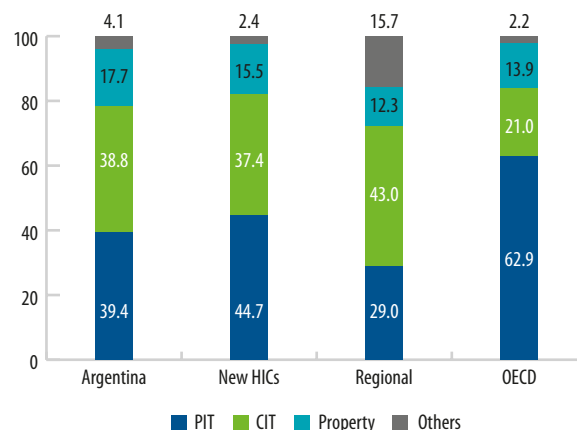
Figure 2.18: Tax burden, 2016, percent of GDP



Source: Data from the International Monetary Fund's Government Finance Statistics (GFS) database and OECD Revenue Statistics database.

Note: CIT = corporate income tax; PIT = personal income tax.

Figure 2.19: Direct tax composition, 2016, percent



Source: Data from the International Monetary Fund's Government Finance Statistics (GFS) database and OECD Revenue Statistics database.

Note: CIT = corporate income tax; PIT = personal income tax.

much “older” countries like Bulgaria and Japan (see figure 2.17), and has almost doubled in the past decade.

The tax burden also increased substantially, though relying heavily on indirect taxes. The tax burden in Argentina reached 31.5 percent of GDP in 2016, higher than regional peers, but similar to new HIC and OECD peers (figure 2.18). Taxes rose by more than 10 percentage points of GDP between 2001 and 2016, because of the introduction of new “emergency” taxes (for example, export duties and a financial transaction tax), the economic recovery, and higher rates (for example, social security contributions and the provincial turnover tax). Unlike OECD countries, and to a lesser extent new HIC peers, Argentina relies heavily on indirect taxes,<sup>8</sup> including the distortive provincial transaction tax and financial transactions tax, and has a narrow tax base. Argentina stands out for having low personal income tax (PIT) revenues compared to the OECD average and new HICs (figure 2.19), due in part to generous treatment of personal deductions and the proliferation of simplified tax regimes (see Gomez Sabaini and Morán 2012), and a very high nontaxable income threshold. Compared to

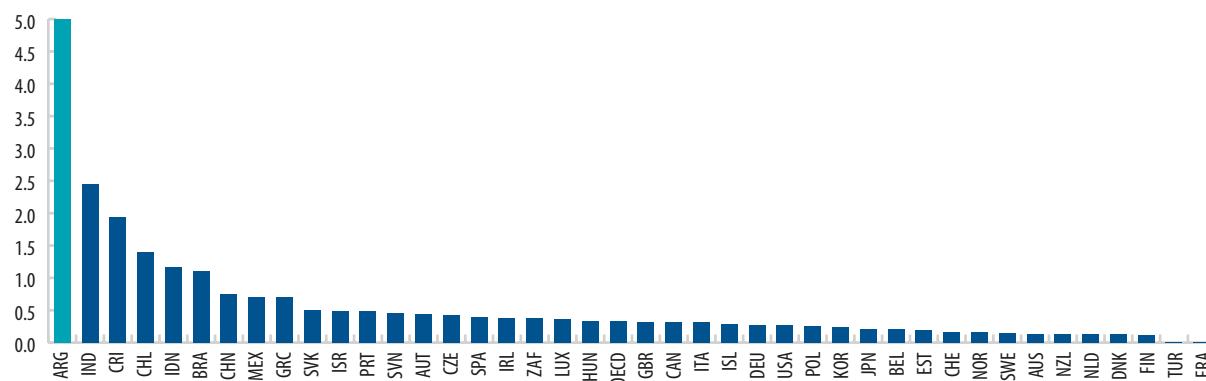
the average wage, the minimal taxable income level in Argentina is much higher than in OECD countries (see figure 2.20). Broadening the tax base and reducing special regimes and exemptions, while shifting the structure toward higher direct taxes and less indirect distortive ones, are the key tax challenges as the country looks forward. The recent tax reform of December 2017 aims to reduce the weight of distortive indirect taxes over time and to decrease the burden of social security contributions for lower-income workers.

A similar story took place at the subnational level. Overall provincial expenditures increased substantially (by 40 percent) in the last decade, only partially matched by own revenue growth, thus putting additional pressure on the transfer system to close the fiscal gap (given the lack of access of provinces to financial markets). Likewise, provincial tax schemes shifted toward distortionary taxes, such as the Turnover Tax (Ingresos Brutos), which generates internal trade barriers—because the tax rate is heterogenous among provinces—and increases domestic prices and discourages exports by being a cascade sales tax.

8 Taxes on goods and services are higher in Argentina than in all its peers both in relative terms (that is, they represent 46 percent of overall tax revenues compared to 33 percent in OECD) and in absolute terms (14.5 percent of GDP against 10.7 percent of GDP in OECD).



**Figure 2.20:** Income threshold where single taxpayers start paying income tax, measured as a multiple of the average wage, 2016



Source: Data from OECD 2017.

Given the size of current fiscal imbalances, fiscal consolidation is still essential to stabilize public debt. The federal government's gross public debt in 2017 is estimated to be about 57.1 percent of GDP (excluding intra-public-sector debt brings the share down to 29.4 percent of GDP). The overall fiscal deficit reached 6.5 percent of GDP in 2017—6.0 percent corresponding to the central government deficit and 0.5 percent to subnational governments (see figure 2.21). In May 2018, President Macri announced that Argentina would start talks with the International Monetary Fund (IMF) to secure a precautionary credit line. The announcement took place following a 5 percent fall in the peso at the beginning of the day, and amid growing worries of a continued run on the currency. The timeline for reducing the fiscal deficit was also made more ambitious, with the 2018 target reduced from 3.2 to 2.7 percent of GDP. As of the beginning of August 2018, the 2019 target was set at a primary deficit of 1.3 percent of GDP, reaching a surplus of 0.2 percent of GDP in 2020. The planned fiscal consolidation effort should yield a declining federal public debt-to-GDP ratio after 2018. The peso depreciation in 2018 is expected to increase the public debt-to-GDP ratio to 65 percent. Implementation of the government's fiscal program would

make public debt converge toward 53 percent of GDP by 2023. There are, however, risks to debt sustainability. The standard debt sustainability analysis stress test shows that, under an RER shock (50 percent real depreciation with 0.25 pass-through), debt could jump to 81 percent of GDP, above the high-risk threshold. Thus, given that almost 70 percent of public debt is denominated in foreign currency, a peso depreciation is a large risk. Debt is also vulnerable to a growth shock (negative growth in 2019 and 2020), as the parameters of the stress test would take it to 70 percent of GDP (see figure 2.22).<sup>9</sup>

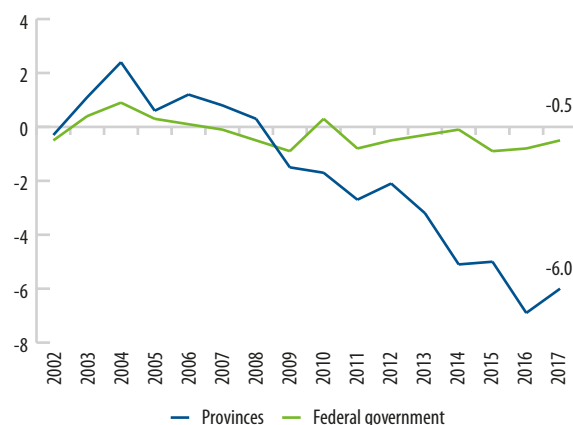
A sound fiscal policy is also necessary to solve Argentina's chronic inflation problem. In the 73 years since 1945, the year when chronic inflation started, Argentina has seen double-digit inflation (or more) in 61 years. This includes three hyperinflation episodes between 1989 and 1990 (see figure 2.23 for a cross-country comparison starting in 1960). Only between 1994 and 2001 did Argentina experience consistently low inflation, the cost of which was having a strict currency board regime. For the most part, inflation can be explained by the subordination of monetary policy to fiscal policy. Figure 2.24 shows the evolution of the fiscal balance and the inflation tax,<sup>10</sup>

<sup>9</sup> The debt sustainability analysis is based on IMF (2018).

<sup>10</sup> The inflation tax refers to the penalty for holding cash due to inflation. This is seen as a tax because it ultimately represents a transfer of real resources to the state, which has monopoly power over money printing, the ultimate cause of inflation. It is computed as the inflation rate times the stock of money in the economy (as measured by M1, which is cash holdings and demand deposits of the public).

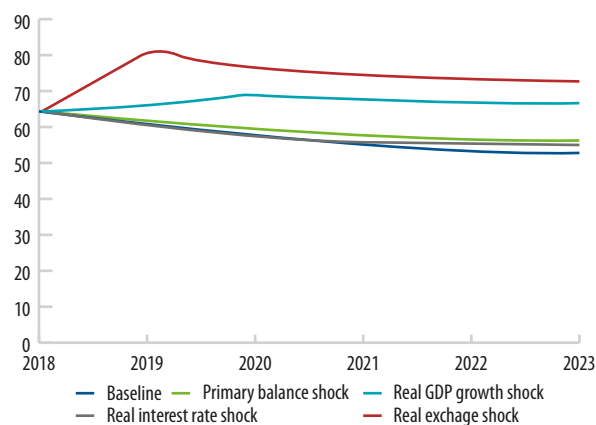


**Figure 2.21:** Argentina: Fiscal balance, percent of GDP, 2002-17



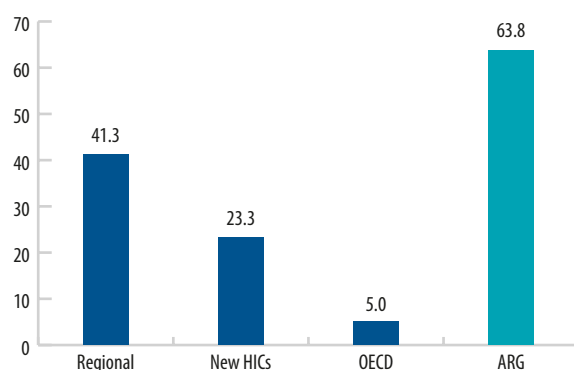
Source: Calculations based on data from the Ministry of Treasury, Argentina.

**Figure 2.22:** Projected debt to GDP, percent, 2018-23



Source: Reprinted from IMF 2018.

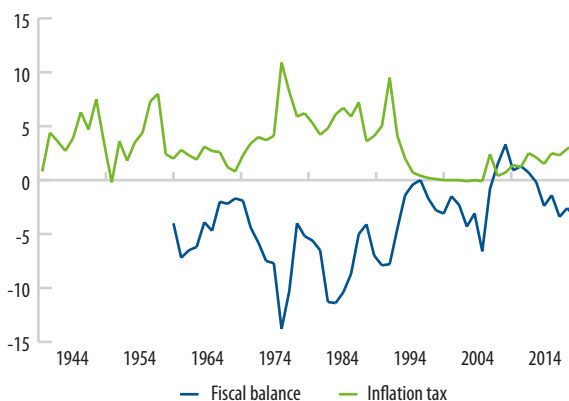
**Figure 2.23:** Average annual inflation rate in comparator countries since 1960, percent



Sources: Data from the World Bank's World Development Indicators; Ministry of Treasury, Argentina; and Instituto Nacional de Estadística y Censos; calculations based on Banco Central de la República Argentina data.

Note: These averages exclude hyperinflation episodes in Argentina, Brazil, and Perú. New HICs = new high-income countries; OECD = Organisation for Economic Co-operation and Development.

**Figure 2.24:** Fiscal balance and inflation tax, in percentage points of GDP, 1944-2013, percent



Sources: Instituto Nacional de Estadística y Censos; calculations based on Banco Central de la República Argentina data.

both as a share of GDP. Both series are close mirrors of each other, except for the currency board years, where monetary policy was limited to defending the peso-dollar parity. The inflation tax is on average 3.3 percent of GDP, reaching peaks of 11 percent in 1975 and 9.5 percent in 1989.

The composition of public expenditure in Argentina and the country's chronic fiscal deficits are detrimental to

growth. Argentina needs to reduce the fiscal deficit to limit external vulnerabilities, private investment, help relative prices adjust in favor of tradable sectors, and allow for an independent, anti-inflationary monetary policy. At the same time, it is important to protect the vulnerable from the adverse impacts of fiscal consolidation. Over time, the country needs to gradually rebalance its expenditure profile to increase the share of investment to support its productive and welfare needs. On the revenue side,



a reduction of overall tax pressure should include a rebalancing of the tax system to rely more on direct taxes such as the PIT and move away from distortionary and regressive taxes such as the financial transactions tax and a provincial turnover tax levied on sales. This turnover tax is levied at each stage in the supply chain without any tax credits for tax paid at earlier stages of production (impuesto sobre los ingresos brutos). Reform of the tax structure and a reduction in tax pressure are, however, challenges that can only be faced once an elimination of the fiscal deficit has been achieved.

## Institutions for growth

Moving toward a new growth model based on greater economic diversification and productivity requires a different set of institutions. According to the *World Development Report 2017: Governance and the Law* (World Bank 2017b), although it is possible for economies to start growing without substantive changes in the nature of governance, sustaining growth over time is difficult without addressing fundamental institutional challenges. The historical experience of countries that “escaped” the middle-income trap and converged toward high-income economies suggests that a range of institutional reforms (strengthening the role of check-and-balances institutions, promoting greater independence and competition in the media market, curbing corruption through effective anticorruption reforms, and so on) were instrumental to create a level playing field among firms and enable contract enforcement and more efficient resource allocations, ultimately contributing to long-term growth and productivity gains.

Power asymmetries and vested interests, however, may prevent the adoption and implementation of reforms needed to enable the transition to a new economic model. In Argentina, a range of priority policy and institutional reforms are instrumental to move the country on a path toward greater diversification and productivity. Such reforms are expected to alter the bargaining influence and preferences of political and economic actors, creating winners and losers. In the face of these changes, interest groups that currently benefit from the status-quo have

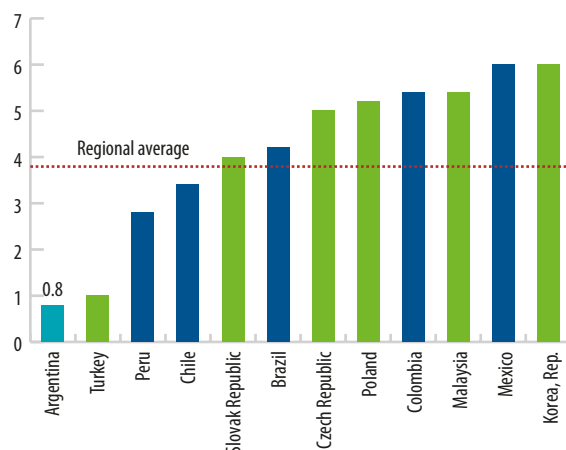
incentives to oppose new economic conditions and thus prevent efficiency-oriented reforms from happening, leading to a low-level equilibrium that undermines the growth potentials. These political economy constraints may be particularly binding in Argentina because actors who gained during an earlier or current growth phase may be powerful enough to block institutional changes that threaten their positions and to resist the switch to a new growth model based on firm entry, competition, and innovation. The notebook scandal, which began to unfold at the beginning of August 2018, offers the country an opportunity to examine past institutional failures in depth and to put its governance institutions on new and more robust foundations, ensuring that a functioning, empowered system of checks and balances exists.

Historical legacies of institutional instability tend to reproduce a low-level equilibrium where the incentives of policy makers and interest groups are dominated by short-term considerations (*corto-placismo*) and opportunistic behavior. For a large part of the 20th century, various types of institutions have consistently failed to take root in Argentina, and the country experienced a level of institutional instability remarkable even by regional standards. Between 1930 and 1983, 12 presidents were removed by extraconstitutional means and successive military coups led to radical institutional reversals in economic policies. Since 1928, only four elected presidents completed their full terms in office; two of them rewrote the Constitution to prolong their presidencies, and another tried to amend it to allow the president to run for a third term. Indeed, Argentina’s history of instability has left an imprint on how political and economic actors interact, fostering a culture of noncompliance with formal laws and procedures and recurrent efforts to circumscribe, manipulate, and change rules and policies perceived to harm short-term interests of powerful actors (Levitski and Murillo 2005; Nino 1992).

Distributive conflicts between the federal and the provincial governments have also undermined the ability of institutions to enforce long-term commitment to policy reforms and induce the coordination and cooperation needed to carry them out. The stark economic inequalities



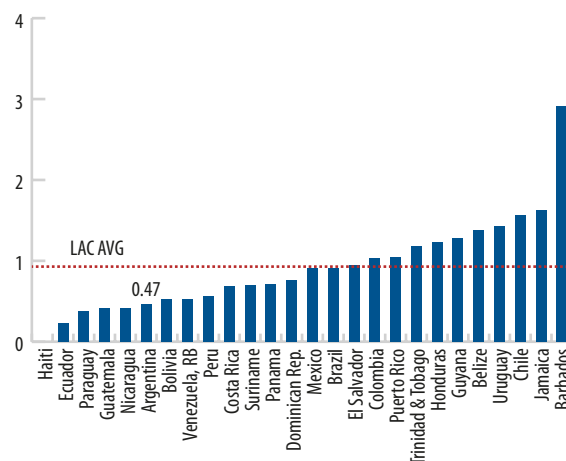
**Figure 2.25: Consolidated Regulatory Governance Score, 2016**



Source: Data from Global Indicators of Regulatory Governance.

Note: The score captures good regulatory management practices in three core areas: publication of proposed regulations, consultation around their content, and the use of regulatory impact assessments. Each core area includes multiple subcomponents in the overall score.

**Figure 2.26: Congress Capabilities Index, Average 1994-2013**



Source: Data from Franco Chuaire and Scartascini 2014.

Note: LAC = Latin America and the Caribbean.

among provinces and the structural features of the Argentina's federal system (vertical imbalance) imply that most provinces are highly dependent on the national government to finance their expenditures. In turn, presidents need to secure votes in Congress to implement economic policies. As a result, the policy-making process can be characterized as “deals” or “exchanges” between president and governors (Scartascini, Stein, and Tommasi 2013; Spiller and Tommasi 2003, 2008), whereby governors grant political support in exchange for fiscal transfers. The governors' political support is provided through the electoral channel (by mobilizing votes during presidential elections); and the legislative channel<sup>11</sup> (by securing votes from provincial legislators for the president's policy agenda and projects in the House and the Senate) (De Luca 2008; Spiller and Tommasi 2008). Moreover, agreements are often achieved through informal channels, undermining legislative and oversight functions of Congress<sup>12</sup>—whose performance is comparatively weak

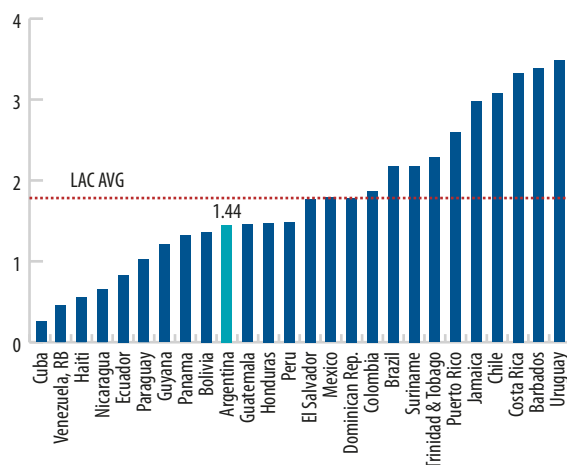
(figure 2.25). As a result, Argentina's rulemaking process often lacks transparency, and there is little space for engagement with key stakeholders and beneficiaries on the proposed content of laws and regulations (figure 2.26). The political economy of the budget process in Argentina illustrates this point, showing how Congress plays only a marginal role relative to other more influential players (Rodriguez and Bonvecchi 2006; Bonvecchi 2008; Hallerberg, Scartascini, and Stein 2009). Moreover, the historical tendency of both civilian and military governments to replace Supreme Court justices with political loyalists has weakened the judiciary, including its ability to enforce laws and sanction noncompliance (figure 2.27 and figure 2.28). Finally, political interference in the public administration has undermined the development of a professional bureaucracy, leaving Argentina with weak cooperation and coordination mechanisms among government agencies as well as across levels of government. Consequently, laws and regulatory practices

11 Due to the closed-list proportional electoral system, governors control the candidate selection process and the nominations for congressional elections, to the point that political careers of individual politicians are often structured and decided at the provincial level (Jones 2002; Jones and Hwang 2005). Consequently, “president need to negotiate not only electoral but also legislative support with governors” (Gonzales and Mamone 2015: 55).

12 In the World Development Report 2017 terminology, this refers to “deal-based” versus “rules-based” elite bargains.

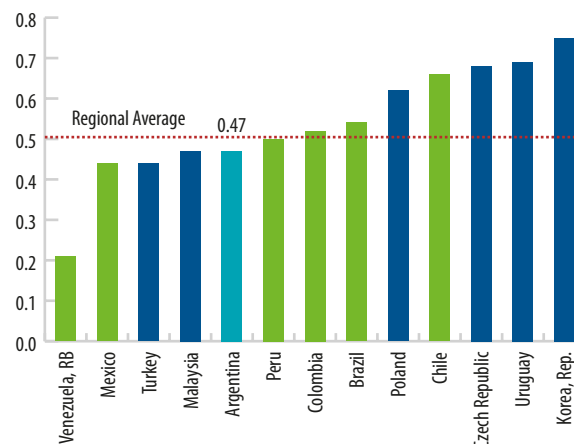


**Figure 2.27: Judicial Independence Index, Average 2001-2013**



Source: Franco Chuaire and Scartascini 2014.

**Figure 2.28: Regulatory Enforcement Index, 2016**



Source: The Rule of Law Project, <http://www.thecenterforruleoflaw.org/rule-of-law-project.html>.

are often enforced in a decentralized and fragmented manner, with different sectors of the public administration operating under different regulations and overlapping responsibilities (Spiller and Tommasi 2008). In turn, this institutional environment allows opportunities for inefficiencies and rent-seeking behavior.

This opportunistic and noncooperative behavior has implications for economic activities. On the one hand, the expectations that certain policies might not endure has inhibited firms' propensity to invest and take advantage of otherwise favorable conditions. The failure of trade reforms to change industrial behavior during the 1990s illustrates this point.<sup>13</sup> On the other hand, the tendency of governments to react to economic shocks through various redistributive mechanisms (subsidies, public expenditures, fiscal transfers, and taxation of export-oriented sectors) further contributes to undermine capital-intensive investments because economic actors expect their profits to be confiscated to address short-term budgetary needs.

The institutional weakness of the state apparatus has created a social environment where perceptions of corruption continue to permeate public affairs. Argentina ranks 85th out of 175 countries on the 2017 Corruption Perception Index. Both the World Economic Forum's Global Competitiveness Index (GCI 2017–18) and the World Bank's 2017 Enterprise Survey report corruption as one of the most problematic factors for doing business in Argentina, with 13 percent of firms having to pay bribes to secure government contracts (slightly below the regional average of 14.4 percent). These perceptions tend to correlate with public opinion surveys: about 41 percent of respondents in Argentina report the level of corruption as increasing over the previous 12 months, and believe the government is doing a bad job of fighting corruption; and 16 percent report having paid a bribe to a public official to get access to basic services (Transparency International 2017).

Over time, endemic corruption can generate significant economic and social costs, undermining citizens' trust in

<sup>13</sup> Acuna (1991) shows that export promotion policies did not produce the expected changes in investment decisions by industrial firms because of the uncertainty of the duration of the policies (quoted in Spiller and Tommasi 2003). This is consistent with the general argument that "it is not trade liberalization per se, but credible trade liberalization that is the source of efficiency benefits" (Rodrick 1989).



public institutions. The challenges related to corruption in Argentina are quite broad: they extend through areas measured by the GCI, taking in ethics, corruption, and undue influence (for example, judicial independence, diversion of public funds, public trust in politicians, irregular payments in public contracts, and favoritism in the decisions of government officials), and with notable weaknesses when compared to peers within the region in the areas of irregular payments in tax collection and ethical behavior of businesses. By facilitating the inefficient allocation of scarce resources, corruption can undermine private investments and competitiveness in the international market. Besides its economic effects, corruption puts the legitimacy of state institutions into question: according to the latest Latino barometer survey, only about one-third of respondents trust the government. Although this is in line with regional and global trends, it is nevertheless worrying because it can undermine the social contract between the state and the citizens.<sup>14</sup>

The current administration is putting in place important changes in the legal framework to promote transparency,

fight corruption and strengthen public integrity. In 2016, the government approved the State Modernization Plan (Decree 434/2016). The plan, which is to be implemented by the recently created Ministry of Modernization, aims to achieve a public administration at the service of citizens within a framework of efficient, effective, and good-quality service delivery. The same year Congress approved a Right of Access to Information Law (Law 27,275), which entered into force on September 27, 2017. Until the enactment of Law 27,275, Argentina was one of the few Latin American countries that did not have a law in this area, together with Bolivia, Costa Rica, and República Bolivariana de Venezuela.<sup>15</sup> The government has also relaunched an open data policy, which it had timidly begun with the incorporation of Argentina into the Open Government Partnership in 2012. Continuing these efforts is critical to institutional reform.

Recent corruption scandal, such as that of the notebooks, provide an opportunity to deepen institutional reforms by tackling key historic and structural causes of corruption, including strengthening the independence and efficiency

### Box 2.1. The notebooks (*cuadernos*) corruption scandal

On August 1, 2018, a large-scale corruption investigation was revealed, which has dominated the news and attention ever since. On August 1, the Justice Department detained five former officials and several businessmen who are accused of having participated in massive bribery schemes associated with public works during the Kirchner administration. The number of former public officials and executives implicated continues to grow. The case is based on information of bribe amounts, names, address, dates, and places that was recorded in notebooks (*cuadernos*) by a driver of the former Ministry of Planning (Oppenheimer 2018; Politi 2018). Many executives called to testify used plea bargains related to the “Repentance Law” (Law 27,304), sanctioned in late 2016. The detailed information recorded in the notebooks reveals the magnitude of the corruption and rent-seeking behavior of public and private sector elites involved in public contracts in Argentina, where public biddings were allegedly guaranteed to specific companies in exchange for bribes. Although the investigations are still unfolding, they are likely to impact future public contracts, such as the public–private partnerships under way, because four out of six active partnerships involve companies mentioned in the investigation (Santi and Slipczuk 2018).

<sup>14</sup> According to the Edelman Barometer, for example, in 2017 only 41 percent of citizens globally trust their governments.

<sup>15</sup> Access to public information in Argentina was regulated at the national level through a presidential decree (Decree 1172 from 2003), which—later reformed by Decree 79/2017—remains in effect until the new law’s entry into force.



of judiciary and oversight institutions. As the fight against corruption continues and large-scale investigations are revealed to the public (see box 2.1), Argentina should remove all obstacles to effectively reducing corruption and demonstrate a sustained long-term commitment to the reform agenda, following the experience of neighbor countries like Brazil.<sup>16</sup> Some of these obstacles are a historically low level of anticorruption enforcement; a judiciary still perceived as inefficient and corrupt because of opacity in judge appointments and instances of political interference;<sup>17</sup> the lack of credible entities in the administrative jurisdiction with the mandate, independence, and capacity to monitor, detect, investigate, and sanction unethical behaviors or corruption practices within the public administration; the lack of a corporate compliance culture among private firms, as well as public integrity laws delimiting the use of public funds by civil servants; and the substantial legislative and economic differences among the various provincial jurisdictions that would ultimately be in charge of applying the federal laws.

## Pathway 2: Open, outward-oriented development model

### Creating financial capital

Low investment is one factor constraining inclusive and sustainable growth. Argentina's investment rate is lower than its regional neighbors, comparable peers, and even its own historical records. Investment to GDP was 16 percent in 2016, below the regional average (20 percent) and significantly below the average among upper-middle-income countries (32 percent). It is also 4 percentage points below the investment rate for 2007, which was

the highest in the last decade. Foreign direct investment (FDI) is also low, accounting for about 2 percent of GDP in 2016, below the regional average and the average for upper-middle-income countries (3.6 and 2.4 percent of GDP, respectively). Public investment is low, averaging 2.5 percent in the last decade. Infrastructure investment strongly relies on public investment (more than 80 percent), and is much lower in Argentina (at 2.7 percent of GDP) than the highest infrastructure investors in Latin America, which invest more than 5 percent of GDP with strong private sector participation (Fay et al. 2017). Low private and public investment has led to a declining capital stock.

Argentina's financial and capital markets are shallow compared to those of comparator countries, thus limiting firm activity and private financial investment in key sectors such as infrastructure. Private bank credit is extremely low at under 14 percent—compared to the 44–45 percent average for the LAC region. Argentina's bank credit is the lowest among the LAC-7 economies<sup>18</sup> of which Mexico and Peru are next lowest at 24 and 37 percent respectively. In the broader LAC region, Haiti's share is higher than Argentina's, at 17.5 percent of GDP. The domestic equity market capitalization represents less than 12 percent of GDP versus comparator countries, which are closer to 40 percent, and the regional average of 35 percent; and private bond market issuances stand at under 1 percent of GDP, much lower than comparators (see figure 2.29). For investor markets in infrastructure, for example, a key challenge will be attracting foreign investors given the large sums needed in sectors typically seen as risky. Incentives will be needed both from a regulatory point of view to facilitate entry into capital markets and in terms of credit enhancement instruments to increase the perceived credit quality of such investments to ensure private finance.

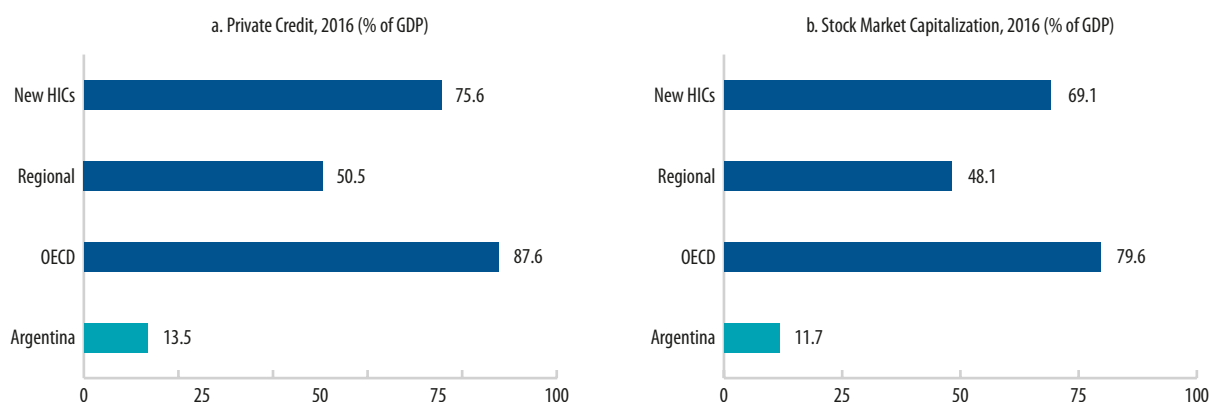
16 Brazil is lauded internationally for its efforts to combat graft. The country have seen a steady increase in bureaucratic audits, civil servants removed from office and fined, and politicians barred from elections for wrongdoing. The adoption of plea bargaining, the strengthening of antiracketeering statutes, and the enhancement of anti-money-laundering laws—along with improved fiscal oversight and banking regulations—were vital to building cases against private and public sector officials alike. Over the past twenty years, courts, prosecutors, police, and oversight agencies grew in autonomy, size, and strength, enabling them to undertake real efforts against graft and move investigations forward. Brazil also began slowly shifting away from patronage, adopting rigorous merit-based examinations and reducing the number of political appointees in the civil service (Praça and Taylor 2014; Power and Taylor 2011; Taylor 2017).

17 The latest (2017–18) Global Competitiveness report ranked Argentina 100th out of 138 economies in judicial independence (3.2 score).

18 LAC-7: Argentina, Brazil, Chile, Colombia, Mexico, Peru, Venezuela.



**Figure 2.29: Argentina: Low capital market depth for its income level**



Source: Data from World Bank's FinStats. f

Note: HIC = high-income country; OECD = Organisation for Economic Co-operation and Development.

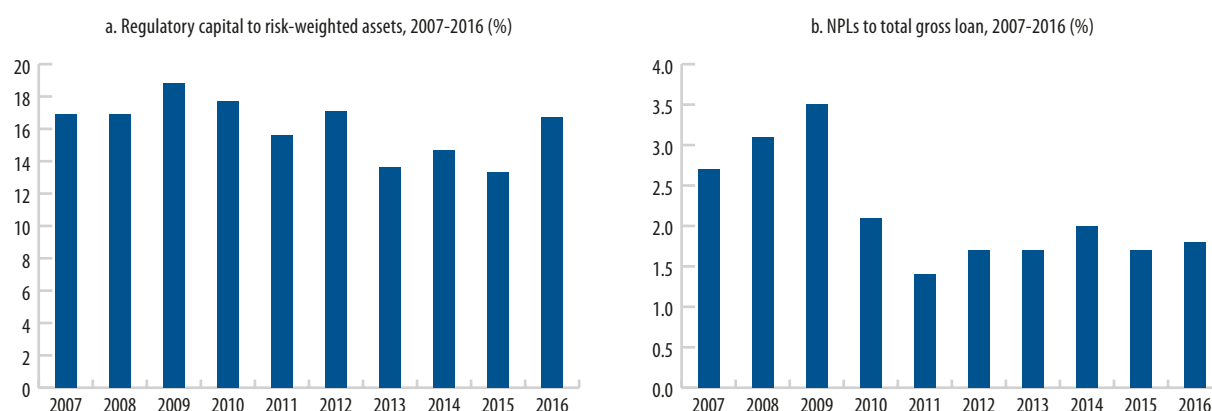
Therefore, deepening capital markets and expanding enterprise and household access to finance is key to mobilizing new capital in the economy. Investment and the allocation of capital are inadequately supported by financial intermediation given the smallness and risk averseness of capital markets and financial institutions, respectively—particularly for a country of Argentina's income level. The financial sector is extremely limited compared to Argentina's peers, both regional and OECD, translating to low financing for infrastructure, housing, small and medium enterprises, and the corporate sector. In addition, the financial sector is highly concentrated with low rates of banking penetration: the five largest banks own 50 percent of total loans, and only 50 percent of the population has access to a bank account. Only 3 percent of micro, small, and medium enterprises have adequate access to financial products with 50 percent being either unserved or underserved. Given the low base, there is substantial potential for the Argentine market to unlock financing for several sectors if the credit and capital markets are developed with appropriate instruments to transition from a high inflation to a stable environment. Housing is the main investment asset for households, but lending for residential housing amounts to less than 1 percent of GDP, thus contributing to a housing deficit and depressed household investment.

In terms of financial sector stability, the relatively small banking sector remains very well capitalized with low nonperforming loans (NPLs) (see figure 2.30). However, given the recent rise in market volatility that began in April 2018, it is important to ensure that contingency plans exist and to have risk mitigation measures in place. With high interest rates maintained to stem inflation, this could generate increased debt servicing stress on enterprise creditors of banks; therefore, banks need to be prepared. A review by financial supervisory authorities of their forward-looking systemic prudential measures would be useful to identify any banks that could have shortfalls in loan-loss provisions if borrower defaults were to rise. Stress testing by Banco Central de la República Argentina is critical, including looking at several scenarios that could develop and cause systemic liquidity stress in the system. In parallel, continued improvements in the financial payments and settlement systems would help to identify if any significant gaps in execution exist.

Overall, there is a huge potential for the financial market in Argentina to grow and bring more resources from the private sector to add to investment, growth, and equitable development. Some of the key constraints initially identified to unlock this potential include (i) review of regulatory and cost requirements for the entry



Figure 2.30: Argentina: Banking soundness indicators



Source: Data from Banco Central de la República Argentina.

Note: The minimum capital/risk weighted asset requirement is 8 percent with a contingent 2.5 percent capital conservation buffer if the minimum is approached.

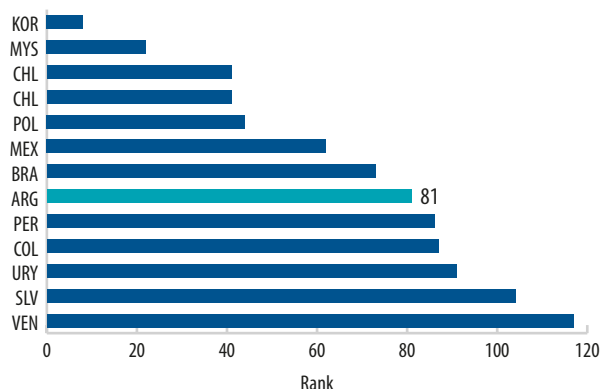
of foreign investors given the funding levels needed; (ii) ineffective procedures, regulations, and public listing requirements for the streamlined issuance of market securities; (iii) management and mitigation of risks such as inflation are needed in order to develop sustainable mortgage loan and securities markets; (iv) untapped identification of revenue and value capture opportunities in the infrastructure project market; (v) suboptimal development of risk mitigation mechanisms to protect public-private partnerships (PPPs) concessionaries and creditors in the infrastructure finance area; (vi) lack of sufficient development of individual retail and e-finance banking products to broaden the scope of access to financial services across the country; (vii) dearth of approaches to augment finance for small and medium enterprises, potentially through innovative instruments and pooling of risks; and (viii) lack of development in the life insurance and private pension markets to increase individual saving safety nets while generating demand for long-term market investment instruments. The tackling of these constraints and the development of new policies and instruments will be a priority to ensure that the government can increasingly rely on the private sector to participate in an economic revival of Argentina.

## Creating the infrastructure to support growth

The quality of Argentina's infrastructure stock is deteriorating, and this poses a challenge to competitiveness. The country faces important challenges related to both the quality of infrastructure and the level of investment. Argentina ranks 81st among 152 countries in the infrastructure pillar of the GCI, well behind the regional leaders such as Chile (36th) and Mexico (45th) and all structural peers (figure 2.31).<sup>19</sup> From 2007 to 2017, Argentina declined in the GCI rankings on overall infrastructure quality perception, falling 26 places from 80th to 106th. Although this is worse than most regional and structural comparator countries that have also fallen, perception of quality improved in 2016 and 2017 both in relative and absolute terms. Ageing infrastructure is taking its toll on competitiveness, with Argentina ranking 96th and 113th out of 144 in terms of road and electricity quality infrastructure in the 2017 GCI (Schwab and Sala i Martin 2018). Bottlenecks in the transport infrastructure—essential to connect enterprise to markets and people to jobs—pose serious challenges, particularly for the Northwest of the country. The great distances that

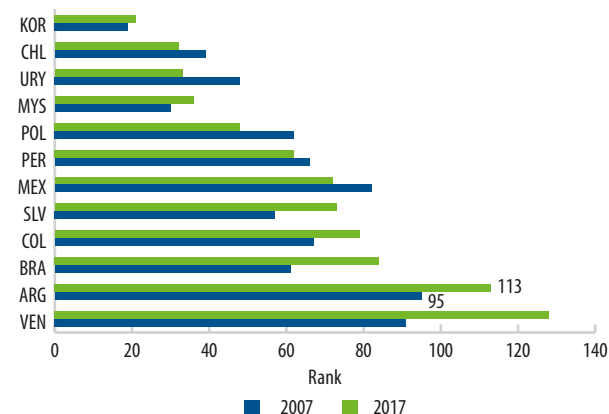
19 Indicator 2.01 Quality of Overall Infrastructure (Schwab and Sala i Martin 2018).

**Figure 2.31:** World Economic Forum's Global Competitiveness Index Infrastructure pillar ranking, 2017



Source: Data from World Economic Forum (WEF), *The Global Competitiveness Report 2017–2018*.

**Figure 2.32:** World Economic Forum's Global Competitiveness Index quality of electricity ranking, 2007 and 2017



Source: Data from Schwab and Sala i Martin 2018.

separate the Northwest from the ports and the country's main centers of consumption are a key driver for elevated transport costs. Addressing these costs calls for provision of high-quality transport assets and efficient provision of ancillary services. The average cost of transporting one ton of cargo from the Northwest to the country's main ports of Rosario and Buenos Aires averages US\$73 per ton, which is between 15 and 20 percent higher than in other regions of the country. In electricity, one of the main challenges inadequate transmission lines. The GCI quality of electricity rank for Argentina dropped from 95th (in 2007) to 113th (in 2017; see figure 2.32).<sup>20</sup>

Infrastructure investment in Argentina is very low with limited room for increasing public investment. Argentina's infrastructure investment rate has been low historically, hovering around 2 percent of GDP (figure 2.33), and is much lower than the highest infrastructure spenders in Latin America (for example, Honduras, Nicaragua, and Panama), which invest more than 5 percent of GDP and

have strong private sector participation. It is also lower than the rates of its regional peers (figure 2.34) and structural peers.<sup>21</sup> Traditionally, Argentina has relied strongly on the public sector (about 76 percent on average between 2008 and 2014).<sup>22</sup> To make the situation more challenging, the country also has limited room to increase public investments. This is true for most of the region, but faster-growing economies, such as Chile, Colombia, Paraguay, and Peru, are likely to fare better in terms of fiscal space for infrastructure than slower-growing ones, such as Argentina, Brazil, and Ecuador (Fay et al. 2017). Things are made difficult also by the fact that primary expenditures play an important role in Argentina's fiscal situation. Moreover, given that even PPPs depend heavily on government support, limitations to public finance also impose constraints on private finance for infrastructure.

Argentina's logistics performance indicators are generally lagging compared to those of its peers. At 27 percent of GDP, logistics costs are the second-highest in Latin

20 With respect to ICT the Argentina's performance is comparable to structural peers and is relatively strong compared to regional peers, as shown by the ITU ICT Development Index, in which the country scored 6.9 out of 10 in 2017 (and is ranked 51 in the World), while structural peers scored 7.0 on average, and regional peers scored 5.7 on average.

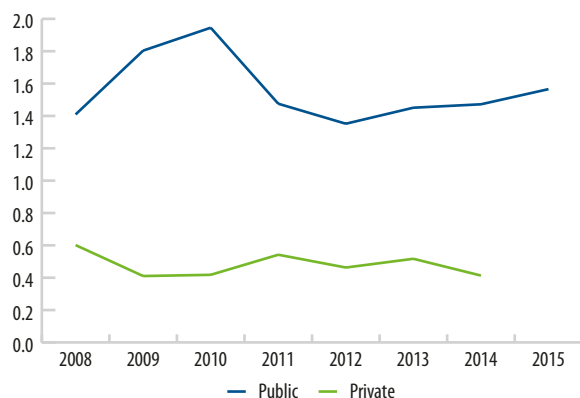
21 Structural peers also tended to invest more than Argentina in infrastructure. According to estimates from the structure Hub, which provide slightly higher estimates than the INFALATAM database (presented in figure 2.34), the average investment in infrastructure as a percentage of GDP between 2007 and 2015 in Argentina was 2.47 percent, which is below the averages for Turkey (2.51 percent), the Republic of Korea (3.21 percent), Malaysia (3.93 percent), and Poland (4.32 percent).

22 For more information, see the INFALATAM database, <http://infralatam.info/>.



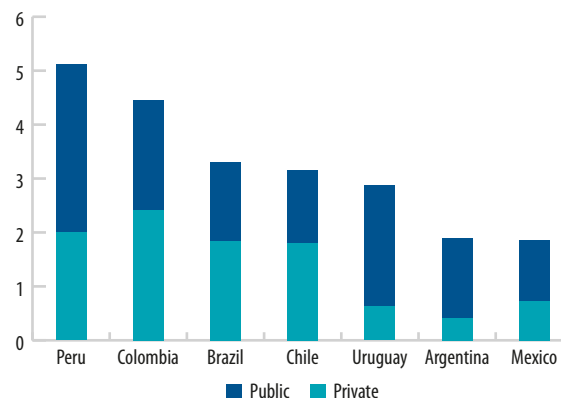


**Figure 2.33:** Infrastructure investment as a percentage of GDP in Argentina by type, 2008-2015



Sources: Data from INFRAATAM database, <http://infratam.info/>.  
Note: Latest year with data available for private investment is 2014.

**Figure 2.34:** Infrastructure investment as percentage of GDP in regional peers, 2014



Sources: Data from INFRAATAM database, <http://infratam.info/>.  
Note: Latest year with data available for Uruguay is 2012.

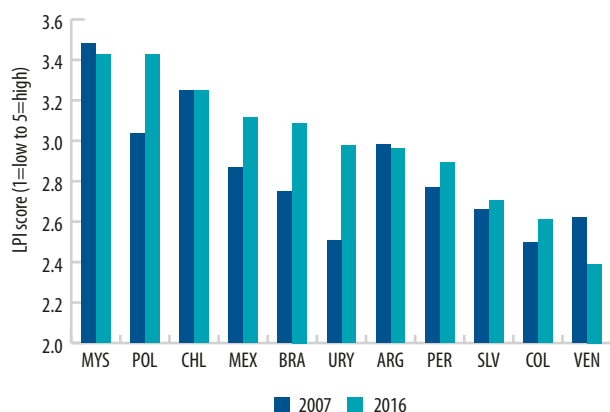
America and nearly three times higher than the average for OECD countries (World Bank 2017f). According to the World Bank's Logistics Performance Index (LPI), Argentina performs similarly to regional peers, but its performance has not improved in recent years (figure 2.35). As a result, in worldwide scale it fell from position 45 in 2007 to 66 in 2016. Some of the factors impacting logistics performance include (i) a heavy reliance on road transport, representing 95 percent of cargo movements; (ii) deficiencies in road infrastructure, including lack of capacity of trunk roads and low levels of road maintenance, particularly in provincial and municipal networks; (iii) the high cost of domestic transportation services; (iv) the restriction in the capacity of waterways and the national port system; (v) the weaknesses in trade procedures and practices, particularly in international border crossings and ports; (vi) infrastructure deficiencies in international border crossings with key neighboring countries including Brazil and Chile; and (vii) the increased costs of urban logistics in the main metropolitan areas in the country.

### Tackling the challenges in infrastructure

Better spending is a key element of improving the status of infrastructure, and heavily depends on better planning between national and provincial levels of government. Argentina's federal structure poses unique

challenges to planning: expenditure responsibilities are not accompanied by an equivalent transfer of tax powers, fiscal decentralization is modest, and infrastructure is not immune. The system for *coparticipación federal* has tried to solve the problem, and approximately 60 percent of the provinces' resources come from nation-to-province transfers. To address this situation, it will be important to set clear planning priorities and develop a more transparent multisectoral methodology to prioritize and select public infrastructure investments. Special attention is required for the logistics network, particularly key corridors, critical exit nodes (such as the ports in the Buenos Aires metropolitan area and Rosario), and major border crossings. Further developing multimodal transport networks is also key. From the organizational side, infrastructure planning and execution are diluted at different layers of government and several other agencies. In the case of water, for example, provinces tend to wait for investments made by federal government, without fixing their utilities' performance issues. Construction of new water treatment plants is prioritized over measures to reduce non-revenue-water (where physical and commercial losses are huge). Argentina would benefit from a more comprehensive and strategic planning approach that covers both expansion plans and maintenance and improvement of existing infrastructure. This would also involve a stronger territorial development approach

**Figure 2.35: Logistics Performance Index, 2007 and 2016**



Source: Data from World Bank's WDI.

that places emphasis on the dimensions of economic geography. A solid national infrastructure policy should also take into consideration the role played by the provinces and municipal governments and a coordination of national and subnational resources and priorities.

Better governance in the infrastructure sectors is also key, particularly when it comes to regulatory autonomy. Argentina is particularly challenged by the coordination of regulation between the national government and the provinces. In the power sector, for example, regulation of electricity distribution is a provincial responsibility, which explains the dispersion in final electricity prices around the country. Argentina has a lower than average performance in the autonomy index, following closely behind El Salvador (Andres et al. 2007).<sup>23</sup> Regulatory governance has distinct effects on utilities' performance indicators (see, for example, Andres, Guasch, and

Azumendi 2008).<sup>24</sup> Argentina can aspire to regulatory bodies with greater levels of autonomy and transparency: the main focus would be tackling the "regulatory" autonomy that includes clarity in their responsibility regarding particular issues (tariffs, service quality, consumer complaints, companies' investment plans, wholesale market, anticompetitive behavior, technical standards) and powers to enforce its decisions. The main challenge is, and will always be, how to find this balance between rationality and politics. Agencies also present significant gaps in terms of the transparency of appointments. This aspect should call the attention of regulators and service providers because a fully professionalized bureaucracy is the last guarantee against undue political influence in regulatory matters.

Improving the mechanisms to leverage private sector financing is an important step in increasing investment, and the government is looking at PPPs as a vehicle to address the infrastructure gaps. The government has improved the PPPs framework to make it more favorable to private investors with the implementation of the new PPPs law approved by the Congress in 2016.<sup>25</sup> This is supported by a new capital markets law, approved in May 2018, to support the development of new long-term financial investment instruments. The government has announced an ambitious US\$26 billion investment program with 60 projects to be financed by private capital.<sup>26</sup> The plan includes investments in capacity and road safety of the national highway network, upgrading existing airports and ports, and the construction and expansion of the rail network, including freight. This is in addition to a large power generation program with the aim of increasing the country's power generation capacity, including renewable energy, by about 20 gigawatts by 2025. However, private

<sup>23</sup> It should be noted that, although the data from the study date from 2007, the regulatory situation in the region has not changed dramatically; therefore, these indexes should provide a relatively accurate indication of the current situation.

<sup>24</sup> These estimates for Latin America show that a one standard deviation change in the formal regulatory governance components had a large effect on improving labor productivity (15.9 percent) and reducing the frequency of interruptions (13.8 percent) and residential tariffs (19.0 percent). A one standard deviation improvement in formal autonomy and the characteristics of the agency in terms of setting tariffs was associated with higher labor productivity (11.4 percent) and a reduction in the average duration of interruptions (17.2 percent). It was also associated with a 42.8–49.3 percent reduction in operational expenditure, with consequent improvements in the cost recovery ratio.

<sup>25</sup> Among other aspects, it promotes the use of specialized funding vehicles to allow increased private investment in infrastructure projects, a legal regime allowing contestability at both the local and international levels, and regulations facilitating funding of infrastructure through the capital markets. The Ministry of Finance also created a PPPs Unit (Subsecretaría de Participación Público Privada, SPPP) that provides guidance and clearance on the gateway process and advices on the financial structuring.

<sup>26</sup> MinFinanzas 2018. <https://www.minfinanzas.gob.ar/el-gobierno-convoco-a-los-empresarios-a-invertir-en-una-argentina-que-reforma-su-infraestructura/>



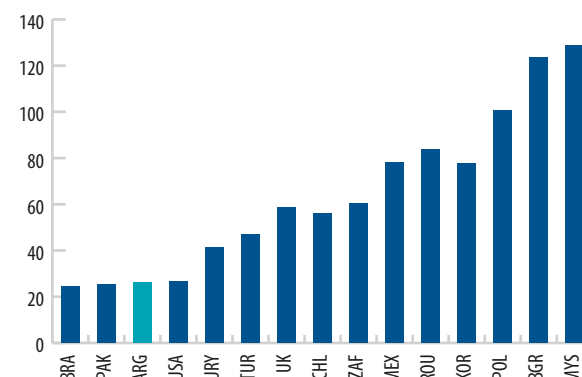
sector financing of a large investment program remains challenging, particularly given the amount of financing and the limited capacity of the domestic capital market to supply the necessary equity and debt. In the water sector, the lack of definition of roles and responsibilities between provinces and the federal government is one of the key bottlenecks in moving forward transactions in a context in which operators do not generate tariffs to recover even operations and maintenance costs. The financial structures will need to find risk allocations consistent with the appetite of investors even if this comes at the cost of limiting the potential benefit of the PPPs scheme, at least in the first set of projects, until a track record is set and more risk can be shared among sponsors and financiers.

Good infrastructure and lower logistic costs are key to Argentina's growth ambitions. Although financing is a key bottleneck, more focused national and territorial goals and efficient strategies can substantially reduce financing needs. In addition, upstream reforms will enable Argentina to both improve spending efficiency and attract private financing on better terms—whether through PPPs or commercial borrowing by public enterprises (Fay et al. 2017). And efforts to improve public investment institutions and frameworks—notably budgeting and procurement systems—should enable the country to substantially stretch the resources it already allocates to infrastructure. An improved framework for infrastructure planning, financing, and investing will be a key driver of competitiveness, an issue to which this diagnostic turns in the following pages.

### Creating an economy open to trade, competition, and investment<sup>27</sup>

The Argentine economy is poorly connected with the world economy and particularly closed to trade. Argentina's trade flows, as a share of its GDP, have fallen by almost half over the last decade, dropping from 40.4 percent in

**Figure 2.36: Trade openness (trade as a share of GDP), percent, Argentina and select countries, 2016**



Source: Data from the World Bank's World Development Indicators.

2006 to 26.3 percent in 2016, which is slightly above the level experienced in 1998 (23.3 percent). Argentina is the fourth most closed economy in the world after Brazil, Pakistan, and Sudan (see figure 2.36).<sup>28</sup> From 2010 to 2016, average trade openness, measured by trade as a share of GDP, was only 29.1 percent. Trade in services, as a share of GDP, is lower than in all neighboring countries. Integration to global value chains (GVCs)—that is, global trade in parts and components rather than end products—is limited. Argentina's average import tariff was 13.6 percent in 2015, well above the level of comparator countries. Nontariff measures (NTMs) further restrict trade flows, with effects similar to those of tariffs as high as 34 percent. Countries around the world participate, on average, in about 14 free trade agreements each; Argentina is a signatory to only one.<sup>29</sup> Product market regulation, as measured by the OECD–World Bank Group Product Market Regulation (OECD–WBG PMR) database,<sup>30</sup> imposed barriers to trade facilitation that are more restrictive than in other LAC countries. As of January 2018, import licenses for about 1,300 tariff lines were still not subject to automatic approval.

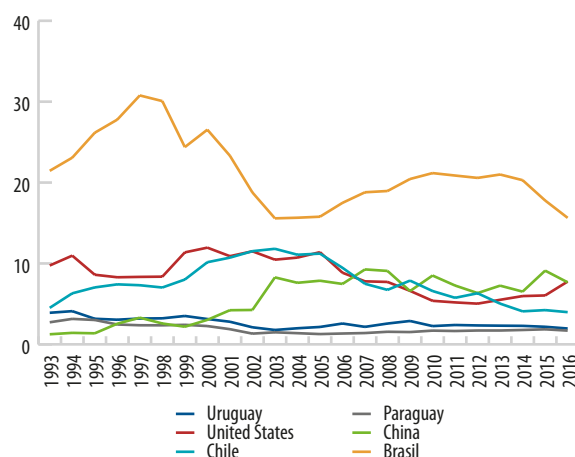
<sup>27</sup> This section is based on World Bank (2018a) and Martínez Licetti et al. (2018).

<sup>28</sup> All values come from the World Bank's World Development Indicators database.

<sup>29</sup> See World Bank (2018a) and Martínez Licetti et al. (2018) for a comprehensive assessment of Argentina's trade, investment, and competition position and reform agenda.

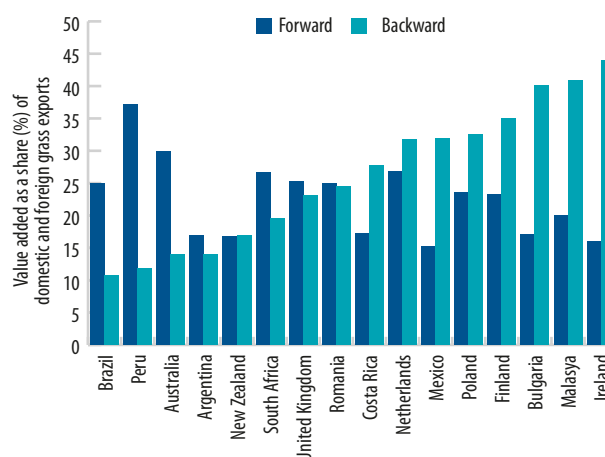
<sup>30</sup> The OECD–WBG PMR data are part of the World Bank's Markets and Competition Policy Database.

**Figure 2.37:** Export destinations, 1995-2016, percent of total exports



Source: Data from the World Bank's World Integrated Trade Solution.

**Figure 2.38:** Global value chain participation: Argentina vs. comparator countries, 2011



Source: Data from Martinez Licetti et al. 2018 based on data from the Organisation for Economic Co-operation and Development–World Trade Organization Trade in Value Added dataset, <http://www.oecd.org/sti/ind/measuring-trade-in-value-added.htm>. Note: Countries are ranked by backward participation ratios.

The potential medium- to long-term gains from integrating into the global economy are substantial. Reforms to eliminate an import licensing system that required preapproval for each incoming shipping load is expected to boost GDP by at least 0.14 percent over a period of three to five years compared to baseline projections, according to computable general equilibrium simulations (Martinez Licetti et al. 2018). Removing all export taxes would expand GDP by at least 1 percent over a period of three to five years compared to baseline projections.<sup>31</sup> A MERCOSUR–European Union free trade agreement would boost Argentina's exports to the European Union by 80 percent by 2030, relative to the baseline. These impulses would not dissipate over time, but would bring permanent gains to the economy.

As a result of poor integration, export products and destinations are undiversified and concentrated in relatively low-value-added goods. Concentration has persisted and even increased in terms of products and destinations since 1995, reflecting barriers to entry into

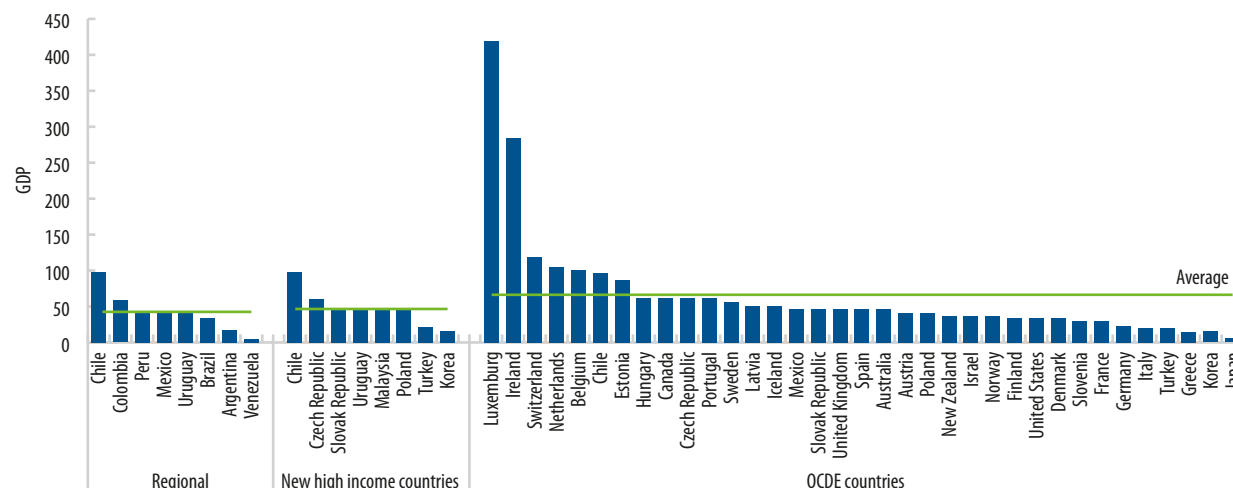
new markets. Vegetables, foodstuffs, and wood represent more than 60 percent of Argentina's export basket, and this proportion has been increasing since 2010. The top exports are soybean meal (17.6 percent), corn (7.4 percent), soybean oil (7.2 percent), and soybeans (5.7 percent). Export destinations are also concentrated in a few countries (see figure 2.37). Argentina has somewhat limited integration into GVCs, the 21st century mode of trade whereby a country does not need to produce an entire export good but rather produces an input as part of the production process (figure 2.38). Argentina is more likely to be the seller (forward GVC participation) mostly because of its export of agricultural commodities that are used as an input in production in other countries (for example, the use of soy in processed soy products). The country is less likely to buy inputs from other countries to produce higher-value-added exports (backward GVC participation).<sup>32</sup>

Much-needed FDI is low and has not contributed to developing more complex export products. The FDI

<sup>31</sup> The potential fiscal implications of this measure also need to be taken into consideration.

<sup>32</sup> Forward GVC participation is measured as the share of Argentina's value added embodied in foreign countries' gross exports. Backward GVC participation is measured as the share of foreign value added embodied in Argentina's gross exports.

Figure 2.39: Inward FDI stock, in percent of GDP, 2016



Source: Data from UNCTADstat, 1970–2016, <http://unctadstat.unctad.org/wds/TableViewer/tableView.aspx?ReportId=96740>.

Note: FDI = foreign direct investment; OECD = Organisation for Economic Co-operation and Development.

stock in Argentina amounts to only 16.1 percent of GDP compared to 44.9 percent in new HICs and 43.1 percent in the region in 2016<sup>33</sup> (see figure 2.39). Weak FDI inflows and stock exacerbate Argentina's already low rate of overall investment; improving this rate is critical for narrowing its infrastructure gap. Even so, FDI inflows have been quite diversified across sectors, with chemicals (15 percent), mining (11 percent), and financial (10 percent) sectors accounting for the largest individual shares (figure 2.40). Other, smaller sectors also contribute to a substantial portion of FDI inflows—including food and beverages (8 percent), communication (7 percent), automotive, machinery and equipment, and wholesale. The challenge, however, lies in ensuring that FDI translates into higher economic and export complexity. FDI complexity itself in Argentina is low at  $-0.39$ , below the global average and below other Latin American countries (such as Brazil and Costa Rica) with similar economic complexity index (ECI) standings (figure 2.41). Unsophisticated, unprocessed products—primarily in the agricultural sector—still dominate Argentina's export basket, leading to a relatively low ECI (Argentina's ECI is  $-0.502$ , placing the country 72nd in the ranking in 2014).

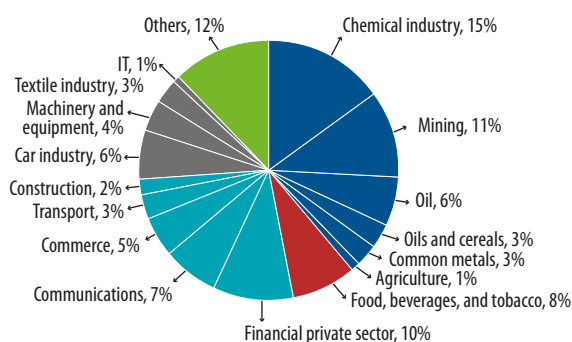
In addition to low import competition, many markets feature government interventions that further curb domestic competition and distort the level playing field. According to OECD–WBG PMR data, Argentina has both the most restrictive product market regulation in the region and more restrictive regulations than other countries of similar size and income levels (see figure 2.42). Argentine state-owned enterprises operate in 17 sectors without a clear set of rules to guarantee competitive neutrality relative to private investors. These and other direct government interventions in the market (such as the price control system) can distort the level playing field.

Lack of pro-competition regulation in enabling sectors holds back firm competitiveness. Regulatory design in key service input markets limits contestability in communications technologies. For example, regulatory asymmetries explicitly prohibit participation in certain segments of the telecommunications industry, preventing the provision of converged and better-quality services (companies that offer pay television by subscription can offer telecommunications services, but not vice versa). Delays in spectrum assignment processes and

33 Represents the simple average for each country grouping.



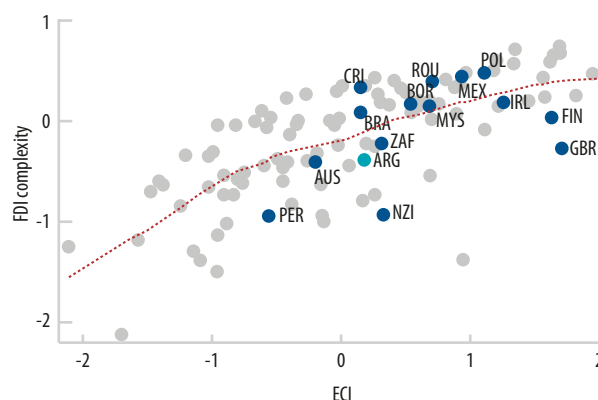
**Figure 2.40:** Sectoral composition of FDI inflows in Argentina, 2010-2015



Source: Data from Martinez Licetti et al. 2018 based on *Banco Central de la República Argentina*.

Note: FDI = foreign direct investment.

**Figure 2.41:** FDI complexity and ECI in 2014, Argentina vs. comparator countries



Source: Data from Martinez Licetti et al. 2018 based on MIT's Observatory of Economic Complexity, <https://atlas.media.mit.edu/en/>.

Note: ECI = economic complexity index; FDI = foreign direct investment.

the absence of rules to protect competitive neutrality have prevented mobile operators from connecting more people at faster speeds. Between 2000 and 2015, there were no auctions for assigning spectrum. Currently, only 40 percent of broadband connections in Argentina provide speeds above 4 megabits per second, compared to 67 percent in top performers in the region. Successive government interventions in all segments of the energy industry have contracted energy supply and affected the reliability and prices of energy services. The regulatory setup does not enable price signals to attract investment in electricity generation. Small and medium enterprises lost, on average, 2.4 percent of sales because of outages, which is double the share in comparator countries.

Firms struggle, in particular, with high-cost, low-quality transport and logistics services, owing in part to rules that do not induce local providers to operate efficiently. Logistics costs in Argentina, at 27 percent of GDP, are the second highest in LAC nearly three times higher than the average for OECD countries, and have grown by 40 percent in real terms since 2003 (see figure 2.43). Argentina performs more poorly on the Logistics Performance Index than would be expected from its per capita income. It also underperforms on specific logistic indicators compared to regional peers. For example, the

average lead time to import or export in Argentina is seven days, compared to four days for the average LAC country. In part, the underperformance and high costs of logistics services reflect inappropriate sectoral regulations. For example, road cargo transport regulations allow truck drivers and transporters to jointly negotiate salaries applicable to all market participants, including those unaffiliated with the respective associations. Such joint negotiation may facilitate or even constitute collusive behavior. In addition, operators that transport their own cargo and exert competitive pressure on public road freight services face distortive rules: they receive only a 30 percent discount on tolls, whereas public road freight providers receive a 100 percent exemption. In the case of railway networks, and given the vertical connections between majority shareholders and cargo rail transport end users, regulators and the competition authority could, for example, collaborate to ensure effective third-party access regulations are in place where appropriate.

The new competition authority, to be set up in 2018, will need to actively enforce anticartel policy as well as implement effective merger control and competition advocacy. Government interventions that restrict competition often enable anticompetitive practices by firms, such as price-fixing cartels. Whereas mature



competition agencies detect five or more such anticompetitive agreements per year, Argentina has recently sanctioned the first cartel in many years, after detecting only two in the entire decade before. The competition law passed by Congress in May 2018 will help consolidate initial reform progress by setting up a new and more independent competition authority, separating the investigation and ruling functions, increasing thresholds for merger notification, creating a leniency program for cartels, and strengthening the competition advocacy function of the authority.

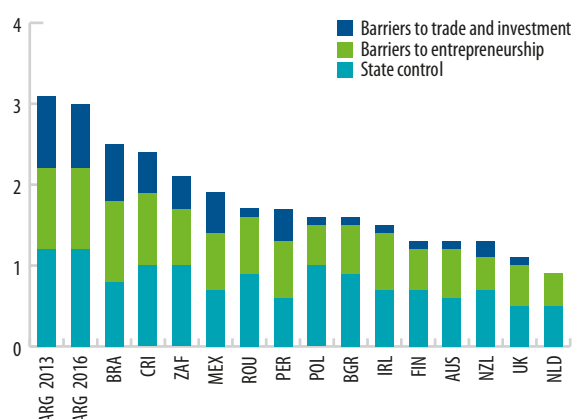
More effective competition policy can benefit Argentine consumers who pay significantly higher prices for key food products sold in relatively concentrated domestic markets. Overall, households in Argentina spend 28 percent of their overall consumption on food products, more than the 14 percent in comparator countries. Between 2010 and 2015, the most important food products cost, on average, almost 50 percent more in Argentina than in international peer countries and 35 percent more than in Pacific Alliance countries (Martinez Licetti et al. 2018). This is generally consistent with information on the

relatively high concentration in these product markets, and the Competition Authority has already selected several of these for market investigations.<sup>34</sup>

More effective competition can further reignite productivity as an engine of inclusive growth. Increasing competition in the manufacturing sector would increase the annual growth rate of labor productivity by 7 percent, on average, with all else being equal. Reducing the regulatory restrictiveness of competition in the Argentine service sectors (such as energy, transport, professional services, and telecommunications) would translate into an additional 0.1 percent to 0.6 percent growth in annual GDP, with all else being equal.

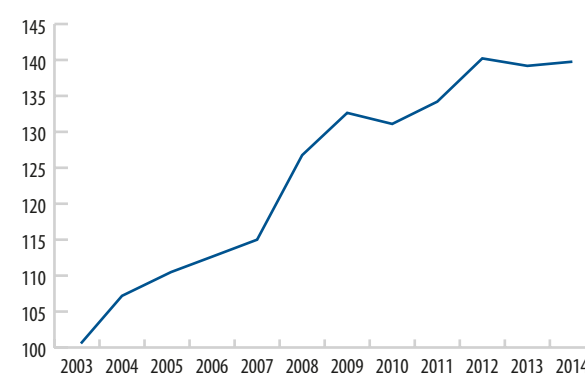
Beyond the empirically well-established gains from integrating into the global economy, the current global trade landscape also opens specific opportunities for Argentina. First, trade in intermediate goods has grown faster than trade in final goods, with FDI as a catalyzer for GVCs. Building on existing capabilities in specific market segments (such as auto and food processing), Argentina can attract FDI in these sectors while strengthening links

**Figure 2.42: Product Market Regulation indicator, Argentina vs. comparator countries, 2013-2016**



Sources: Data from OECD Product Market Regulation database, <http://www.oecd.org/eo/-growth/indicatorsofproductmarketregulationhomepage.htm>, and OECD–World Bank Group Product Market Regulation database for LAC countries 2013–16, as of May 2018, <https://datacatalog.worldbank.org/dataset/markets-and-competition-oecd-wbg-pmr-indicators-selected-lac-countries-2013-2016>.

**Figure 2.43: Logistics cost index (2003=100), 2003-2014**



Source: Reprinted from Castro, Szenkman, and Lotitto 2015.

34 The level of concentration is only one indicator of the intensity of competition. Further analysis undertaken at specific stages of the supply chain would contribute to identifying specific barriers and constraints that might be affecting competition





with local suppliers in order to reorient the production structure and integrate into GVCs or regional value chains. Second, services trade now represents 20 percent of global trade. Argentina can leverage comparative advantages in services to increase FDI and exports (for example, in knowledge-based service sectors). Unlike the goods sector, exports of services are already more diversified than in comparator countries—with 49.7 percent of total service exports represented by information and communications technology (ICT), professional, and other services; 18.3 percent by transport; and 31.6 percent by travel. Third, ICT tools can facilitate cross-border e-commerce and the participation of smaller and new entrants in global markets by boosting their ability to reach a sufficient scale. Retail e-commerce in Argentina grew by 50 percent between 2010 and 2015, much faster than in peer economies, but Argentina's share in world retail e-commerce is one-fifth that of Australia and Brazil. This points to untapped potential.

The gains from integrating into the global economy for inclusive growth will depend on the degree to which domestic markets encourage firms to operate efficiently and price competitively. Ensuring that the gains from trade opening are shared across the economy requires that firms can enter, invest, compete, and have access to competitively priced and high-quality inputs. Firms that already operate or seek to invest in Argentina have faced challenges across all four conditions, and the solutions to these challenges lie in all three policy areas (trade, investment, and competition) across the four conditions. No single policy can ensure that these conditions are fulfilled and firms can integrate into the global economy. Rather than sequencing reforms among policy areas, this report suggests sequencing specific reform options within each policy area so as to advance in all three areas simultaneously. If producers and retailers can exercise market power, they may fail to pass on reduced input costs to consumers. For example, in India, there is evidence that input tariff declines were offset by firms raising markups by 11 percent, on average. Similar results have been found after Mexico's tariff decline due to the North American Free Trade Agreement (De Loecker et al. 2016; Robles Santamarina 2018).

Priority policy actions in trade, investment, and competition can be complemented by improvements in institutional resources and capacities. Key trade policy actions include lowering tariffs and NTMs in priority sectors, unilaterally reducing NTMs in input products, removing nonautomatic licenses to increase predictability, and boosting regional integration agreements to increase market access. Competition and trade authorities can further coordinate to harmonize technical standards with trade partners. To improve investment policy, Argentina can revise the incentives framework, introduce effective policies to promote links with local suppliers, and set up comprehensive regulatory improvement and simplification mechanisms. Through cooperation among competition and investment promotion authorities, the government can open up key sectors to investment. To boost competition policy, Argentina can continue strengthening its anticartel enforcement, implement the recently overhauled merger control framework, strengthen pro-competition sector regulation in key sectors such as telecommunications and transport, and implement competitive neutrality principles to ensure that public and private operators compete on a level playing field. Each of the respective institutions for trade, investment, and competition policy will need to be well resourced, prioritize its engagements and actions, and achieve greater technical independence.

### Enhancing the capacity of firms to benefit from expanded markets

For Argentina to successfully integrate into the global economy, as well as overcome external obstacles such as trade barriers, changes within firms will be needed to improve productivity. Since 2006, the productivity of all firms has fallen. Reversing this process will involve further reforms to improve the external conditions firms face. But improving productivity also requires improvements within firms, including higher rates of technological transfer, ICT adoption, and innovation, as well as improvements in the managerial quality of Argentinian firms.

New firms and entrepreneurs face significant barriers at all stages of the firm life cycle, preventing efficient reallocation



of resources from low-productivity to high-productivity uses. Trade liberalization, the elimination of red tape, and continued efforts to improve the business climate, together with increased investment in infrastructure and new laws to promote competition and facilitate financing, are poised to pay off provided macroeconomic stabilization is achieved. For its income level, Argentina stands out for its poor performance in international surveys of the environment for conducting business: it ranks 92nd out of 137 countries in the GCI (Schwab and Sala i Martin 2018) and 117th out of 190 countries in the World Bank's Doing Business Survey (World Bank 2018c). The evidence also points to a lack of competition in input markets as being particularly problematic: Argentina ranks close to the bottom in the world in GCI pillars related to the efficiency of markets, both for final goods and services and for factors of production. In a 2017–18 World Bank survey of business owners and top managers, the biggest obstacles to enterprise growth in Argentina are reported as high tax rates, labor regulations, and political instability. However, the effects of barriers differ by type of firm: larger firms perceive labor regulations, business licenses, and corruption as the worst obstacles to doing business, whereas smaller firms perceive tax rates, tax administration, and as well as access to finance as worse obstacles than do large firms.

Argentina's firms invest too little in innovation; creating an innovation ecosystem connecting researchers, businesses, and government will be essential to enhance their productivity and capacity to export. The country invested 0.6 percent of GDP in research and development (R&D) in 2014, higher than the average of regional peers (0.5 percent) but much lower than the new HICs average (1.3 percent) in improving productivity. The country's Science, Technology and Innovation system will have to play a crucial role. Forty percent of (formal) manufacturing firms did not perform any innovation-related activity, and only 13 percent of manufacturing firms have an R&D department. Business investment in R&D is 0.06 percent of GDP, and Argentina performs worse than the OECD average on competences to innovate and skills for innovation. Argentina falls below OECD average public R&D spending as a percentage of GDP, as well as on

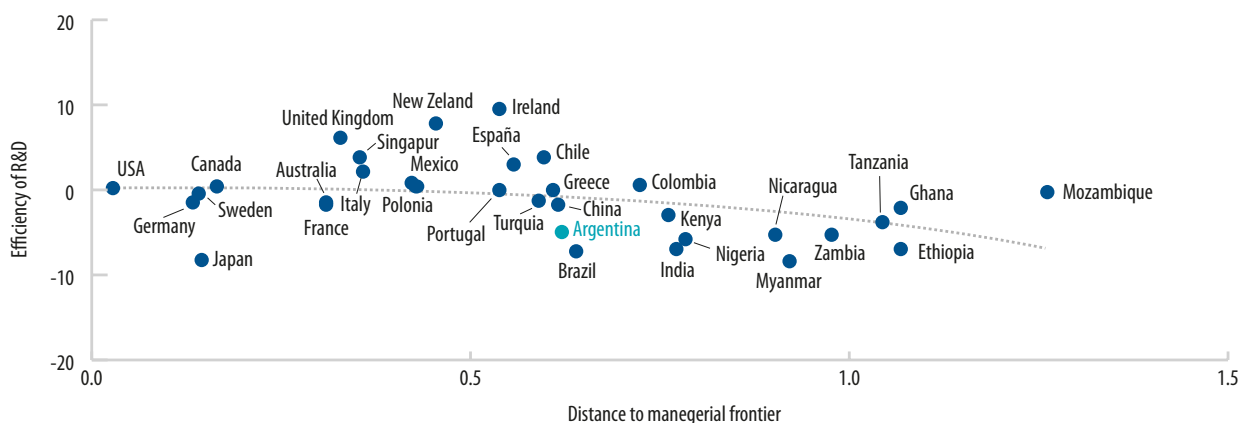
publications in top journals and universities among the top 500 (OECD 2017a). Indicators of private innovative activity also lag significantly behind OECD comparator countries, with low business spending on R&D, no top 500 corporate R&D investors, and low patenting and trademark activity (OECD 2014). Facilitators of innovative entrepreneurship, such as sources of venture capital and access to broadband Internet and other ICT infrastructure, are likewise scarce, as well as skills in science and engineering where Argentina performs better than other Latin American countries but still far behind the average OECD country. Argentina performs close to the OECD average on indicators of networks, clusters, and transfers, including international coauthorship and international coinvention. Building on these strengths, the innovation system will require more private sector-financed innovation and better knowledge transfer between academia and firms capable of commercializing new scientific and engineering breakthroughs.

To take full advantage of R&D, Argentina should also invest in complementary factors, such as physical, human, and especially managerial capital. Argentina's challenges with respect to human and physical capital are known, and are discussed in Chapter 3 and Section <B head>Creating the infrastructure to support growth, but the importance of managerial ability at the firm level is often overlooked. Management quality has a dual impact on productivity: a direct effect through a more efficient use of factors of production and an indirect effect by increasing the probability of innovating. Figure 2.44, for example, shows the correlation between the impact of R&D on innovation and good management practices across countries (Cirera and Maloney 2017). Argentina lags with respect to best managerial practices, and this negatively affects the efficiency of R&D and the scope of technological absorption. Also, it makes much more challenging the creation of a vibrant export sector, where firms face the challenge of developing and producing products, and having marketing and distribution practices tailored to capture new external markets.

There are success stories in Argentina. Firms have managed to remain at the global frontier despite macroeconomic



Figure 2.44: Management practices and impact of R&D on innovation, 2015



Source: Reprinted from Cirera and Maloney 2017, 81.

Note: R&D = research and development.

### Box 2.2. Argentine wine: A case of export emergence

Until the early 1990s the vast majority of wine production in Argentina was dedicated to the domestic market, and no wine was specifically adapted to be sold abroad. After knowledge of how to make New World wines spread throughout the sector, exports increased dramatically—rising from US\$25 million in 1993 to US\$806 million in 2017. (Figure B2.2.1 shows the increase in constant US\$ 2010 million terms). During the same period the number of countries to which Argentina sold its wines rose from 45 in 1993 to 115 in 2008. By 2008, Argentina had become the tenth-largest exporter of wine in the world, capturing slightly over 2 percent of the world market. How did Argentina do it?

Artopoulos, Friel, and Hallak (2014) find that export emergence can be distilled to two critical factors:

**Finding 1: Consistent exporters adopt a markedly different set of business practices.** They also exhibit a common mindset about the importance of adopting these practices and a discourse that suggests that they are mutually complementary.

**Finding 2: An export pioneer, defined as the first individual to implement the set of export business practices outlined above, was also the first to become a consistent exporter.** Export pioneers have a knowledge advantage about foreign markets to which they were previously exposed.

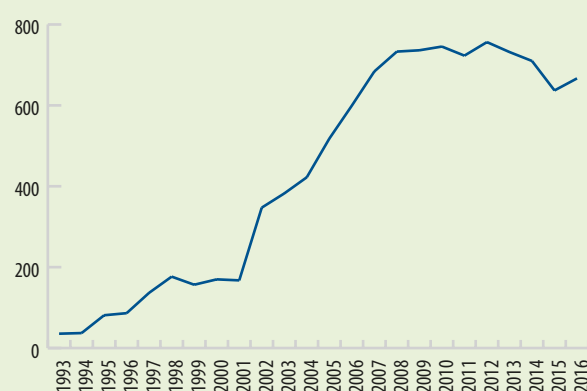
In Argentina, the export pioneer was Nicolás Catena Zapata, the first Argentine wine producer to systematically adopt the practices outlined above, achieving consistent sales of New World wines to developed countries. His winery was also the only one to achieve unabated export growth to the OECD from 1994 to 2006.

Catena Zapata had taken control of his family winery in 1963 while working toward a PhD in economics at Columbia University. He traveled back and forth from New York to Mendoza, the center of wine production in Argentina, on a regular basis during his studies. Catena Zapata's efforts to develop a New World wine made in Argentina began after he returned from a three-year stay at the Department of Agriculture and Resource



Economics at U.C. Berkeley in the early 1980s, where he was a visiting professor. During this time, he visited wineries in Napa Valley, befriending winemakers who had developed and mastered New World winemaking techniques. One of the most important acquaintances he made was Robert Mondavi, one of the leaders of the New World wine revolution in California. According to Catena Zapata, his decision to undertake this transformation was not based on a detailed economic analysis of potential markets, but rather on a desire to emulate the success he had witnessed in the United States.

**Figure B2.2.1: Argentina: Wine Exports, in US\$ 2010 million, 1960-2016**



Source: Data from United Nations Comtrade database, <https://comtrade.un.org>.

In the 1990s, the Argentine economy underwent economic liberalization reforms, enabling wineries to upgrade equipment allowing for New World production techniques. Argentina's soil is particularly well-suited to meeting a variety of demands in terms of taste because it can accommodate up to 28 different grape varieties. However, despite conducive economic and geographical conditions, consistent exporters had to take the next step and adapt production techniques to the specific demand tastes and export requirements of foreign markets.

Atropoulos, Friel, and Hallak (2014) affirm that export business practices are radically different from those that prevail in the domestic market, which involve adapting products to foreign demand and establishing information channels

to keep up to date about evolving patterns. Export business practices also require upgrading production processes to improve quality, complying with the requirements of foreign distributors such as rigorous expectations in terms of quality consistency and timely delivery, as well as other specific requirements like packaging and back-office procedures. Finally, export businesses need to establish and maintain long-term relationships with foreign distributors to secure up-to-date information about foreign markets.

**Policy implications:** Artopoulos, Friel, and Hallak (2014) suggest that public policy that seeks to promote high-wage jobs should include export development policies that promote the diffusion of export business practices. Policy makers could, for example, promote conferences through business associations and educational institutions designed to facilitate the transmission of explicit and tacit knowledge from emerging pioneers to potential followers.

volatility and microeconomic distortions. Firms in the oilseed complex, for example, collectively became the first exporting sector of the country thanks to the adoption of direct sowing techniques, and this complex is now a world leader in the field (see Penna and Lema 2003). In addition, this led to the creation of new subsectors along the value chain, such as biodiesel, where Argentina is the top world exporter, and to the development of synergies

with knowledge-intensive sectors such as biotech. Box 2.2 presents a case study of the emergence of Argentina's wine industry, which—despite the barriers to innovation and growth documented above—has managed to become world class.

The skills gap is not limited to managerial skills; it also affects the capacity of firms to efficiently fill vacancies



with the right profile of workers. According to a recent Manpower Survey, 59 percent of firms have difficulty finding the right skills to fill vacancies (OECD 2017a). The skills gap is wider in Argentina than in comparable countries—with 20.8 percent of the labor force having tertiary education, compared with 32 percent in the OECD, and only 12 percent of students in secondary education enrolled in vocational programs, compared to 25.8 percent in the OECD. Recent data from the unmet labor demand survey (*Encuesta de Demanda Laboral Insatisfecha*) reveals persistent shortfalls in the skills required by firms when hiring, especially for operatives.<sup>35</sup> Incentives to upskill in Argentina are also lower than in other Latin America countries: earnings premiums for tertiary education are 48 percent compared with 55 percent in the OECD and as high as 133 percent in Colombia and 105 percent in Mexico.

The dual nature of the Argentine economy is a major limitation for reaping the benefits of expanded market access. Alongside the highly productive clusters described above lie a myriad of firms characterized by their low dynamism and that need high levels of protection to survive. Many of these firms operate in the informal economy, limiting their ability to generate quality jobs and take advantage of improved business conditions. These firms sometimes employ a disproportionate share of the labor force, especially low-skilled workers, and any negative shock to them can have significant effects on the more vulnerable portions of the population. The inefficiencies of such firms, usually clustered in particular sectors, spread to the rest of the economy through higher prices for key inputs, such as computer equipment, generating a vicious cycle of low productivity and low growth. The dual nature of the Argentine economy manifests itself in the extent of informality and the differential effects

on different populations. Informality is a lot higher for young, female, and low-skilled workers.

Argentina's firms have a big opportunity to take advantage of an opening up of the economy to upgrade their products, technologies, and business processes. Because the potential returns increase with the distance to the frontier (see Griffith, Redding, and Van Reenen 2004), Argentina's lackluster productivity performance opens the door for large returns from innovation and technological transfer investments. Given the large externalities involved, however, this is not a passive process where the opening up of the economy will naturally bring Argentina to the global productivity frontier, but one that needs an active commitment by public and private actors. First, there is a need for macroeconomic stability and policy predictability. Second, a reduction in government red tape (particularly to ease firm entry and the efficient exit of low productivity enterprises), getting rid of the barriers to competition, and over time reducing the burden of distortionary taxes<sup>36</sup> are important for decreasing costs to facilitate business activity. Third, supportive government policies can help foster innovation and competition, and develop an export sector through policies that promote the diffusion of export business practices. Fourth, deepening the financial sector with a larger variety of financial instruments will be required to allow firms to benefit from opportunities to innovate and build on existing capabilities.<sup>37</sup> Fifth, Argentina needs to ensure education and skills attainment compares well with the best in the OECD from basic education onward to position itself for high-wage, differentiated export production.

35 In Argentina, the largest skill gap is for operatives (average 40 percent from 2010 to 2015), followed by professionals (36.8 percent), and finally technical labor (23.1 percent). In terms of years of experience, the largest gaps are for workers with no experience (36.5 percent), three to five years' experience (32.3 percent), and one to two years' experience (27.4 percent) (OECD 2017a).

36 Argentina comes in 169th in ease of paying taxes in the Doing Business 2018 rankings.

37 The capital markets law (*Ley de Financiamiento Productivo*) passed by Congress in May 2018 can contribute by fostering financial innovation. A growing Fintech sector offering new sources and methods of finance for small and medium enterprises, such as factoring and crowdfunding, together with new simpler corporate forms such as the Simplified Corporation (*Sociedades por Acciones Simplificada*, SAS), will be important complements for the innovation ecosystem.





MINISTERIO DE  
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ESC. Nº 4355 MARIA LUISA LO

## CHAPTER 3





## TOWARD A MORE INCLUSIVE SOCIETY

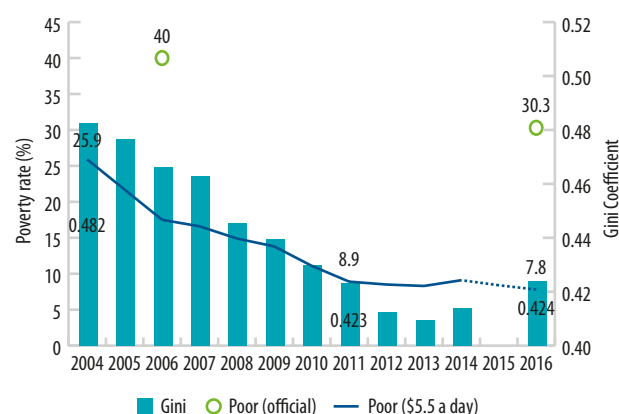
### Recent trends in poverty and shared prosperity—and the challenges ahead

After the severe economic crisis at the turn of the 21st century, Argentina experienced remarkable inequality and poverty reduction since 2004, followed by a persistent slowdown of progress since 2011. Although the urban poverty rate and Gini index fell between 2004 and 2016 (from almost 26 percent to slightly below 8 percent and from 0.48 to 0.42, respectively), two different phases can be clearly identified: (i) strong improvement in welfare levels and equality, which coincided with a strong recovery up to 2011, and (ii) stagnant or slightly worsening welfare indicators with slower overall economic growth from 2011 to 2016 (figure 3.1 and figure 3.2).<sup>1</sup> These dynamics reflect the significant improvement combining a fast postcrisis

recovery in the first four years and a solid improvement since 2007, and the later slowdown of shared prosperity. As discussed previously, the slowdown reflects the fact that the rapid growth and poverty reduction in the first period came hand in hand with an unsustainable growth model that started to show its limits in the second period.

Although poverty was reduced in almost all the Latin American and Caribbean (LAC) countries, Argentina's performance stood out in both phases—but for different reasons. Argentina reduced poverty at a higher rate than other countries between 2004 and 2011, but at a slower pace during the period 2011–16. For example, the poverty rate dropped by 17 percentage points in Argentina, 15.3 in Brazil, 11.6 in Chile, and 11.1 in Uruguay in the first period, whereas it contracted by 1.1 percentage points in Argentina, 3.9 in Brazil, 6.0 in Chile, and 2.2 in Uruguay in the second period. This difference is related to shared prosperity developments. Before 2011, Argentina was among the best performers with incomes of the poorest 40 percent of the population (the bottom 40) growing at almost 9.5 percent annually, and among the worst

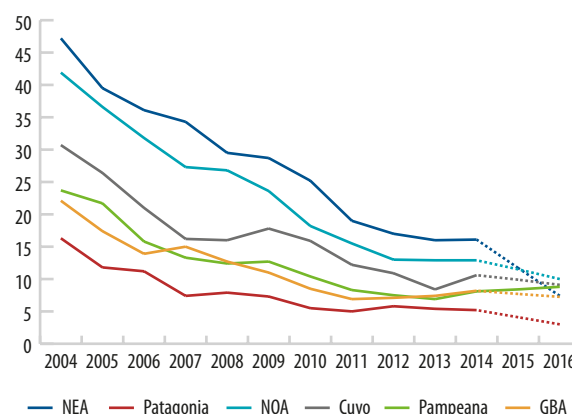
**Figure 3.1: Poverty and inequality in urban Argentina, 31 main cities, 2004–2016**



Source: Data from SEDLAC (CEDLAS and World Bank), based on *Encuesta Permanente de Hogares—Continua* (second semester).

Note: Because of comparability challenges, poverty rates are based on the US\$5.50 a day poverty line (in 2011 PPP), which is closer to the current official extreme poverty line.

**Figure 3.2: Urban poverty (US\$5.5 a day) by region, 31 main cities, 2004–2016**



Source: Data from SEDLAC (CEDLAS and World Bank), based on *Encuesta Permanente de Hogares—Continua* (second semester).

Note: Because of comparability challenges, poverty rates are based on the US\$5.50 a day poverty line (in 2011 PPP), which is closer to the current official extreme poverty line.

<sup>1</sup> Welfare data are based on the *Encuesta Permanente de Hogares* survey that covers only the main urban areas (31 agglomerations), representative of only 63 percent of the total population of the country. See box 3.1 on the representativeness of the household survey and the implications for the excluded populations.



performers in 2011–16, when incomes of the bottom 40 and the average did not grow at all (figure 3.3).

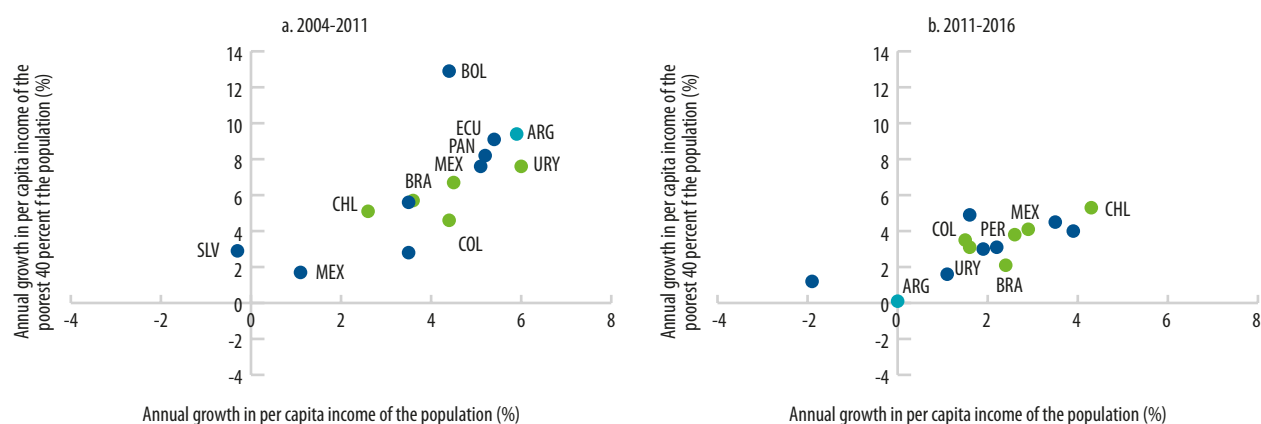
Welfare changes for the bottom 40 in 2004–11 were mainly driven by the recovery in labor incomes (figure 3.4). Family incomes grew largely because of the positive performance of labor income, particularly among the poorest households, as well as a continued job creation after 2007. During this period, employment grew at a rate of 2.2 percent per year, driven by wage earners primarily in large but also small firms (figure 3.5). This increase of employment and shrinking of the skill wage gap is associated with the commodity boom, which increased demand for low skill workers (Fernandez and Messina 2017; Messina and da Silva 2017), in addition to the recovery of idle capacity right after the crisis and a consumption growth model with a macroeconomic scheme that favored national firms (Beccaria, Esquivel, and Maurizio 2005). Fast earnings growth also reflected the strengthening of labor market institutions (Lopez-Calva and Lustig 2010; Gasparini and Lustig 2011).

During this period since 2004, disadvantaged groups saw some improvements in their situation. Although female employment grew faster than male employment and the (uncontrolled) gender earnings gap narrowed from 68 to

76 percent, relative to the total population, the female labor force participation rate has ceased to grow in the last fifteen years. As a result, it currently lags behind other LAC countries (Gasparini and Marchionni 2017; Mateo Diaz and Rodriguez Chamussy 2016). Fast economic growth, increased earnings, and expansion of social assistance might be behind this general slowdown (Gasparini and Marchionni 2017), but childcare difficulties and preference against hiring women with children may also play a role.<sup>2</sup> During this period, the informality rate among wage employees was also reduced considerably as a result of both formal job creation and formalization of existing jobs (Bertranou, Casanova, and Sarabia 2013; Maurizio 2014), but it stagnated at about one-third in the last few years. Despite this, the unconditional wage gap remained almost at the same level during the whole period, and the conditional wage gap persisted (Paz 2013; Bertranou et al. 2014).

In addition, government transfers became especially important for families in the lower deciles during 2004–11 and, hence, contributed to extreme poverty reduction (Bustos and Villafañe 2011; Salvia, Tuñón, and Poy 2015). Pensions were an essential source of additional family income—in particular, among the vulnerable—because of the pension moratorium passed in 2005. Pension

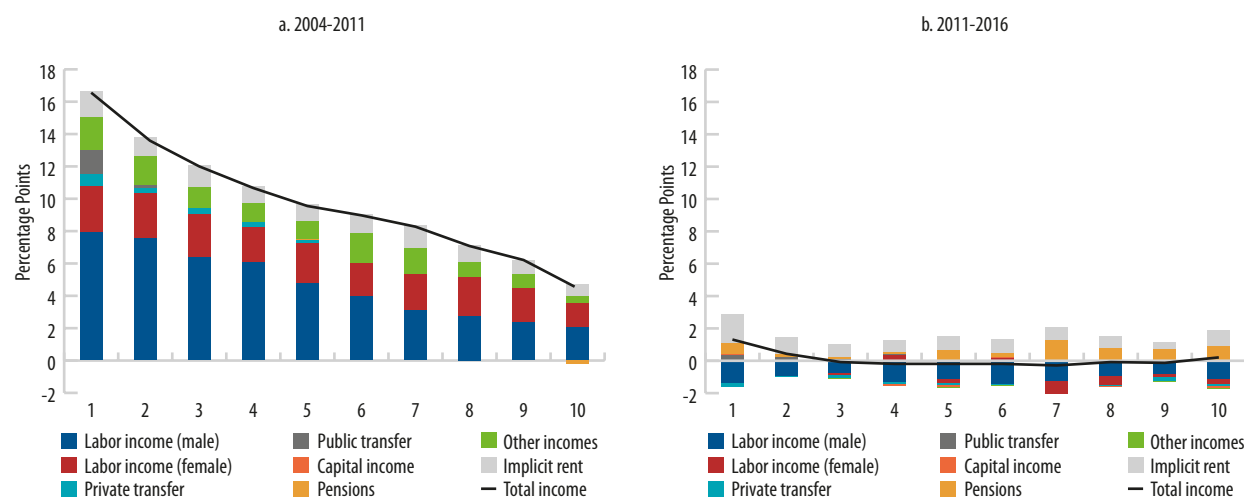
**Figure 3.3:** Annualized income growth for the average and the poorest 40 percent, Latin American countries



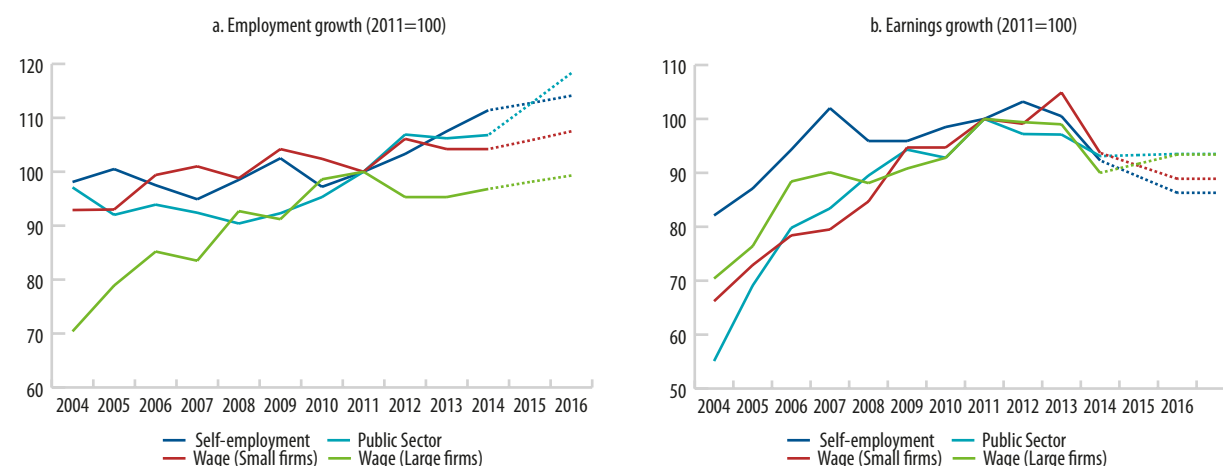
Source: Data from SEDLAC (CEDLAS and World Bank).

Note: Argentina is marked in red. Regional peers are marked in orange.

2 Data from Latinobarómetro 2015, Online Data Bank (database). <http://www.latinobarometro.org>.

**Figure 3.4:** Decomposition of per capita income growth per decile, by source of income

Source: Data from SEDLAC (Cedlas and World Bank), based on *Encuesta Permanente de Hogares—Continua*.

**Figure 3.5:** Labor market performance, 2004-2016

Source: Data from SEDLAC (CEDLAS and World Bank), based on *Encuesta Permanente de Hogares*.

coverage among the elderly increased, reaching almost 95 percent, and doubled from about 40 percent to 80 percent for those in the bottom quintile, giving generous starting pensions to new beneficiaries (Rofman and Olivieri 2012; Rofman, Apella, and Vezza 2015). The decline of families receiving social transfers following the phasing out of the *Jefas y Jefes de Hogar Desocupados*

program (launched to address the 2001/02 crisis) was reversed with the creation of the *Asignación Universal por Hijo* (AUH) in 2010,<sup>3</sup> which reached 15 percent of households by 2016.

From 2011 to 2016, family incomes across the whole distribution stagnated, primarily because of a contraction

3 The AUH is a noncontributed cash transfer program for all families with school-age children in which neither parent is contributing to the social security program (informal workers, unemployed, or inactive). The conditional part of the transfer is based on children's school attendance, medical checkups, and vaccinations, as well as pregnancy checkups.



### Box 3.1. More than a third of Argentines are excluded from poverty statistics

Argentina is the only country in the region in which the survey used to measure poverty does not have national coverage. The *Encuesta Permanente de Hogares* (EPH) is carried out in only 31 main urban areas and is representative of only 6.3 out of 10 residents. The EPH is an expanded labor force survey covering on a continuous basis the provincial capitals and cities above 100,000 inhabitants. Since 2010, other urban areas with population over 2,000 inhabitants (where a third of people live), are also sampled in the third quarter of the year. However, poverty estimates are not extended to this sample and this dataset is not yet available since 2014, so it is impossible to calculate the poverty rate for this group. In addition, although the rural population represents a relatively small fraction of the total population (9 percent, according to the 2010 Population, Household, and Housing Census), an urban-only household survey, even if the smaller urban areas were included, may underestimate national poverty: rural households are twice as likely to have at least one unsatisfied basic need (18.2 percent compared to 8.3 percent nationally).

The exclusion of rural areas also means that certain vulnerable groups are systematically excluded: for example, there are proportionally twice as many indigenous people in rural areas. In addition, available datasets for urban areas (such as the EPH) do not include questions that would allow identifying indigenous peoples or afro-descendants. The Population Census is the only source of information to characterize both rural population and ethnic groups in terms of living standards (dwelling characteristics, education attainment, among others). Yet this source does not allow an assessment of whether they are more deprived in terms of incomes or employment than others in the population.

in labor incomes compensated only partially by pensions and public transfers (figure 3.4). The meagre 1.1 annual employment creation during this period was driven mainly by public employment and self-employment, whereas wage employment in large firms remains almost at the same level (figure 3.5). This slowdown in job creation reflects the limitations of a demand-driven development strategy, in a context of less favorable terms of trade than in the previous years, which resulted in the decline in labor productivity. Manufacturing contracted by 6 percent between 2011 and 2016, and the main employment gains came from the expansion of services (including public sector) and commerce. Rising inflation also reduced the real value of wages (8.7 percent in the five years over 2011–16), with the largest losses seen among self-employed and small-firm wage employees (figure 3.5).

### Challenges ahead

Despite the significant reduction over the last 15 years, income poverty is still high in Argentina. The urban poverty rate—measured at US\$5.50 per capita per day in 2011 purchasing power parity (PPP)—is about 8 percent. This upper-middle-income country poverty line is similar to the official extreme poverty line, but significantly lower than the official poverty line. According to this last threshold, 3 out of 10 people would be considered poor in the second semester of 2016. Poverty is concentrated regionally in three areas—the two northern regions and Greater Buenos Aires—where about 70 percent of the poor live. Additionally, its incidence is twice as high among children aged 0 to 14, with one in four children classified as poor;<sup>4</sup> and among recent migrants (see appendix B). Today, two million people live in informal settlements

4 Using national poverty lines, half of children are considered poor. The discrepancy arises because the national poverty line is significantly higher than the one used to make the international comparison. The \$5.50-a-day line used in this present text is closer to the national extreme poverty line.

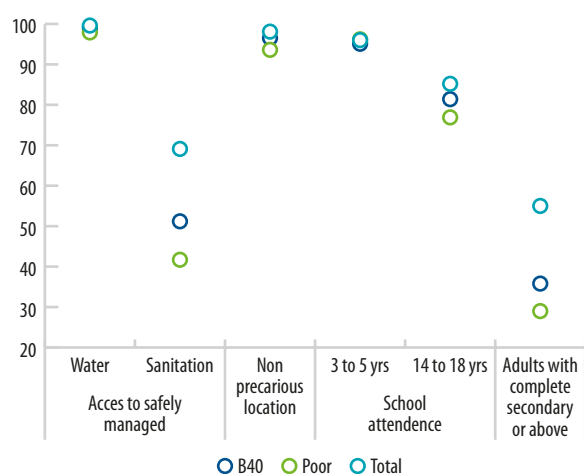
lacking property rights and basic services, which contrasts with the emergence of enclosed neighborhoods where a large portion of the rich live. Finally, of great concern is the extent of missing information on the living standards of a large share of the population (box 3.1).

Access to basic services and resulting social outcomes are determined by place of residence and family background, limiting intergenerational mobility. Access to education, health, and piped water or sewerage networks varies widely across provinces (figure 3.6). For example, the Northwest region has an average of 0.04 health centers and 0.09 schools per 1,000 people, against the national average of 0.14 and 0.19 per 1,000, respectively (World Bank 2017a). Infant mortality declined at a faster rate in poorer provinces than in richer ones, but coverage for control and prevention of chronic diseases is still significantly better in richer provinces (World Bank 2017d). Children under five in the poorest provinces in the north, such as Formosa, are almost twice as likely to die, and maternal mortality rates in La Rioja and Formosa are six to seven times higher than in the City

of Buenos Aires (figure 3.7).<sup>5</sup> In addition, children living in poor households are three times more likely to be out of school and live in households with no safely managed water or sanitation; and poor elderly people are two and a half times more likely to live in a precarious dwelling and without safely managed water and sanitation (see appendix B).

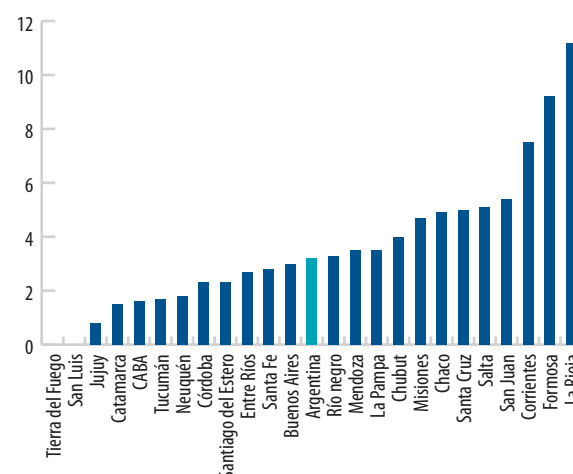
Indigenous peoples (IPs) are particularly vulnerable. A larger share of IPs lives in precarious slum-like conditions (24 percent) than do non-IPs (13 percent). In the cities, 79 percent of IPs have access to water and 47 percent to sewerage, compared to 84 percent and 53 percent, respectively, of non-IPs. IPs also lag behind non-IPs when it comes to access to health and education. Among IPs, 53 percent have some kind of health insurance, compared to 64 percent of non-IPs. In education, although there are no significant differences on average in school enrolment or attainment among IP and non-IP populations, starker gaps emerge for specific groups. For example, a rural indigenous woman is considerably less likely to finalize primary or secondary school than a non-indigenous rural

**Figure 3.6:** Access to services, living context and school attendance, and level of education, 2016



Source: Data from SEDLAC (CEDLAS and World Bank), based on *Encuesta Permanente de Hogares-Continua*.

**Figure 3.7:** Maternal mortality (per 10,000 births) across provinces, 2013



Source: Ministerio de Salud, Argentina.

<sup>5</sup> Source: Data from Estadísticas Vitales. Dirección de Estadísticas e Información de Salud, Ministerio de Salud, Argentina. <http://www.deis.msal.gov.ar/index.php/estadisticas-vitales/>



woman, and an urban non-indigenous woman is almost four times more likely to finish secondary school than a rural indigenous woman.

Labor informality is one of the main challenges today. Accounting for about 30 percent of wage employees, informality is still high, especially among less educated women (figure 3.8). Except for Patagonia, more than half of women with less than complete secondary are informal, a proportion that reaches 70 percent in the northern regions of the country. Informal wage earners not only have fewer perks but also earn lower salaries. The unconditional wage gap between formal and informal jobs was about 42 percent in 2016, a difference that does not disappear even after controlling for relevant characteristics.

Labor market outcomes for women are particularly disappointing. At 46.6 percent, the female participation rate in Argentina is the third lowest among all peer countries, and significantly lower than the average in Organisation for Economic Co-operation and Development (OECD) countries (54.2 percent). The participation gap between women and men is particularly large among less educated workers (31 percentage points), a difference that closes to 9 percentage points for those who finished university degrees. Significant levels of informality, especially among less educated (figure 3.8); reduced opportunities to access better paying jobs; and limited access to affordable childcare services are among the reasons behind this gap (Beccaria, Maurizio, and Vázquez 2017). Women earn less than men, even controlling for a set of relevant variables.<sup>6</sup> Women earn on average 34 percent less than men, and the difference is driven by the fact that they are more typically employed in low-paying jobs (more informal, part-time, and in low-paid activities) as opposed to being paid differently for the same job (figure 3.9).

A large proportion of 15- to 24-year-olds are not employed or in school, particularly affecting young girls and those in the poorest regions of the country. One in five young adults

is not in employment, education, or training (NEET); and almost a quarter of women are NEET, one of the highest rates among peer countries (figure 3.10). Within the country, these numbers are particularly worrisome among the *Partidos* of Greater Buenos Aires, where 23 percent of all young people and 28 percent of women are NEET. Associated with this higher incidence among women is the fact that the adolescent fertility rate (births per 1,000 women ages 15–19) is at 63.8, three times as high as in the OECD.<sup>7</sup> Because many youth drop out of school before finishing upper secondary levels, they lack the necessary skills to secure a formal sector job and settle, instead, with informal unstable employment (De Hoyos, Rogers, and Székely 2016). Indeed, among the youth with wage employment, 56 percent are informal (figure 3.11).

Going forward, the labor market needs to recover lost momentum as a force to reduce poverty and inequality. Employment rates, particularly among men and youth, ceased to grow and slightly declined since 2011. As mentioned in chapters 1 and 2, Argentina requires not only more jobs but also growth in labor productivity. Two out of three jobs belong to low-productivity industries, in sectors such as social and personal services, restaurants and hotels, or construction (figure 3.11), in which the informality rate is high.

In the short run, the transition toward an outward-oriented high-productivity model may bring about challenges for employment. Theoretically, the lowering of tariffs and barriers to external competition will lead to a reallocation of labor from less to more productive sectors with consequent welfare gains at the aggregate level. Although conditions are different from the liberalizations of the 1990s (in terms of the speed of the process), Argentina's past experience<sup>8</sup> with opening the economy highlights the need to ensure that adequate social protection policies are in place to ease the transition. Estimates for alternative opening models (considering the employment characteristics of affected sectors) suggest that, in the

<sup>6</sup> Based on Mincer equations and Oaxaca Blinder decompositions.

<sup>7</sup> Source: WDI based on United Nations Population Division, World Population Prospects.

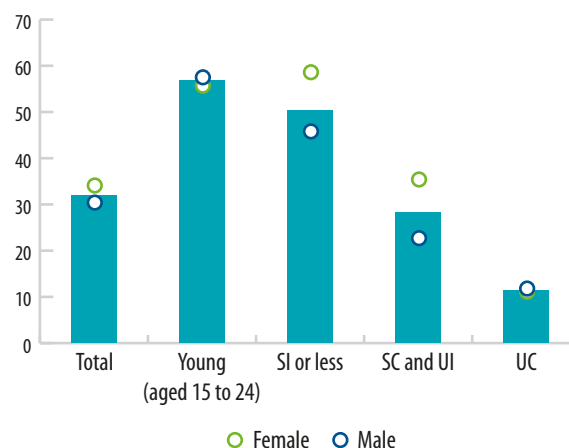
<sup>8</sup> On the distributional effects of liberalization of the 1990s in Argentina on employment, see Sánchez and Butler (2004); Porto (2008); Peluffo (2010); Acosta and Montes Rojas (2014); and Cruces, Porto, and M. Viollaz (2016). On skill premium, see Galiani and Sanguinetti (2003); Galiani

short run, skills mismatches may result in increased unemployment. Also, the wage skill premium might rise because trade openness might affect labor-intensive industries negatively but provide a premium to higher-value-added services. In addition, given the relatively low level of formalization of both affected and expanding sectors, there might be pressure toward informalization (Lugo, Rodríguez Chamussy, and Viollaz 2018).

Beyond this, the demographic transition will increasingly put pressure on the economy. Argentina is currently at a very opportune stage of its demographic transition, yet the country risks not taking full advantage of it. Both the demographic and the economic dependency ratios are at a historical minimum. Until the aging period starts in the 2040s (when the dependency ratio<sup>9</sup> starts to grow), it is necessary to ensure that the greatest portion of the active population can generate savings. Estimates suggest that aging alone could represent a drag on growth of up to 0.2 percentage points in the next 30 years.<sup>10</sup> However, policy measures and socioeconomic forces could outweigh the demographic trends. Increasing female labor force participation to match that of men in 15 years would increase per capita growth on average by 1 percentage point per year in the next 15 years, and still reach 0.3 above the baseline after 30 years—more than compensating for the demographic effect. In addition, increasing the proportion of workers who contribute to the social security system (which now stands at a third among wage employees), particularly among the youth, will be essential.

Technological change—which may be accelerated by trade openness—could deepen inequality in the medium and long run, unless accompanied by complementary investments in human capital, institutional reforms, and public policies. Automation would displace part of the labor force, particularly those who perform routine tasks. During the past 20 years in Argentina, as well as in other

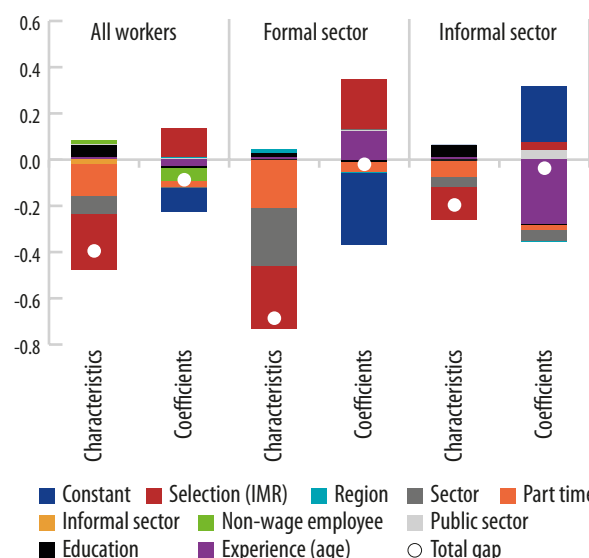
**Figure 3.8: Informality rate among wage-employees, second semester 2016**



Source: Calculations based on data from SEDLAC (CEDLAS and World Bank).

Note: SI = secondary incomplete; SC = secondary complete; UI = university complete; UC = university complete.

**Figure 3.9: Gender monthly labor income gap, contribution of characteristics and coefficients**



Source: Calculations based on data from *Encuesta Permanente de Hogares—Continua 2016* (second semester).

Note: The figure presents the results of Oaxaca-Blinder decomposition for three types of workers: formal sector, informal sector and all workers.

and Porto (2010); and Falcone and Galeano (2017). For other countries in the region, the most relevant papers include Goldberg and Pavcnik (2003); Alemán-Castilla (2006); Menezes-Filho and Muendler (2011); Bosch, Goñi, and Maloney (2012); Paz (2014); and Dix-Carneiro and Kovak (2017).

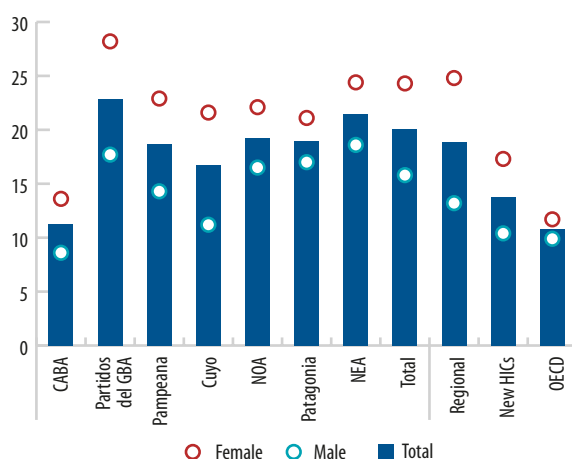
9 The dependency ratio is defined as the ratio between the number of children and elderly (under 15 and over 65 years old) and the working-age population (aged 15 to 64).

10 Calculations based on Bloom et al. (2010), *Instituto Nacional de Estadística y Censos*, and UN Population estimates.



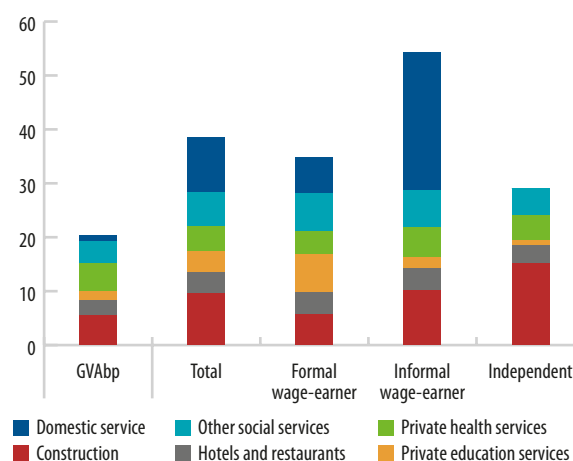


**Figure 3.10:** Share of youth (15-24) not in employment, education or training, circa 2016



Source: Calculations based on data from SEDLAC (CEDLAS and World Bank), based on *Encuesta Permanente de Hogares–Continua*, and International Labour Organization.

**Figure 3.11:** Private sector industries with low labor productivity, share of the Gross Value Added at basic prices (GVAbp) and jobs creation, 2016



Source: Calculations based on data from National Accounts.  
Note: Low-productivity industries are those whose labor productivity is lower than 66 percent of the average private sector in the economy.

parts of the world (Eastern and Central Europe, Germany, Latin America, and the United States), technological change has been reflected in a shift from jobs that are highly intensive in routine manual (RM) tasks toward a greater intensity in cognitive tasks (figure 3.12) (Apella and Zunino 2017). This new scenario may cause labor market polarization, with an increased demand for high-earning cognitive work as well as for low-earning non-routine-manual (NRM) occupations, accompanied by a reduction in demand for routine tasks with medium earnings (figure 3.13). In this context, there is a clear challenge for public policy associated with the need to train and reassign low-skilled workers to tasks that are less susceptible to automation, that is, those that require an intensive use of creative and social intelligence.

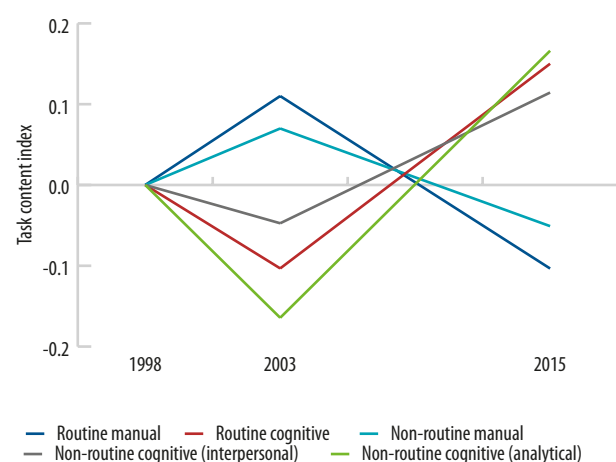
### Pathway 3: Releasing constraints to productive inclusion

Argentina still faces challenges to ensure that everyone is able to contribute and benefit from a successful transition to a sustainable high-productivity/high-wage

model. Because the labor market represents the main source of incomes for the largest part of the population, positive employment dynamics—including an increasing formalization rate—are key for continued household welfare increases. Ensuring that the population has adequate levels of human capital is essential for job creation (World Bank 2013). Yet the sharp spatial and socioeconomic differences in access and quality of services limit Argentines' ability to accumulate crucial assets needed for taking equal advantage of available opportunities and breaking with duality, as well as for transitioning toward a more competitive economy. Behind these differences lie fragmented social service systems, worsened by a federalist structure with unequal capacity to deliver services and with limited compensation mechanism at the disposal of the state. As a result, investment in children and youth is deficient, undermining the chances for social mobility. In addition, the excessive geographic concentration of economic prosperity means that opportunities in the lagging areas are scarce, and that agglomeration economies are not fully exploited. Finally, the relatively generous welfare system, more akin to those of OECD countries (although more heavily biased toward the elderly) is at odds with a

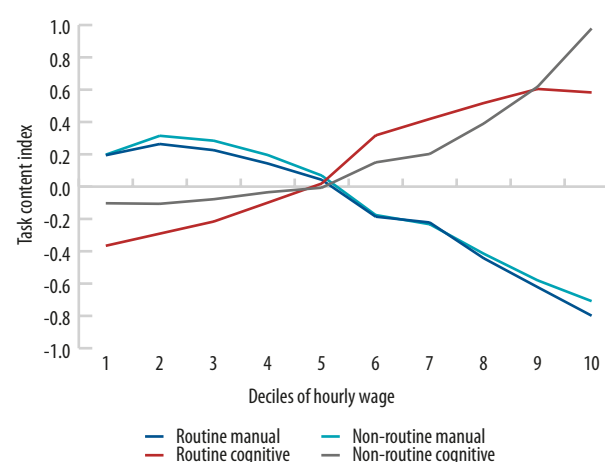


**Figure 3.12:** Intensity of the tasks performed in a job, Argentina, 1998–2015



Source: Apella and Zunino (forthcoming), based on Occupational Information Network (O\*NET) database, <https://www.onetcenter.org/>, and *Encuesta Permanente de Hogares–Continua*. Note: Task content index measures the relative importance of a task performed by the average worker in the economy.

**Figure 3.13:** Intensity of the task performed across deciles of hourly wage, Argentina, 2015



Source: Apella and Zunino (forthcoming), based on Occupational Information Network (O\*NET) database, <https://www.onetcenter.org/>, and *Encuesta Permanente de Hogares–Continua*. Note: Task content index measures the relative importance of a task performed by the average worker in the economy.

less progressive tax structure, typical of economies the middle class aspires to emulate. Despite its generosity, the system might be neither sufficiently prepared to protect the losers of the transition nor cost-effectively providing quality social services, particularly for children and youth, to compensate for the prevailing gaps across groups and across the country.

## Investing in human capital

In the short term, the underperformance in educational outcomes, despite the reasonably high spending levels, may hinder the country's ability to increase productivity and respond to changing demands. Learning, much more than attainment, has been found to be associated with economic growth (Hanushek and Woessmann 2008). Although coverage of formal education and public expenditure (at 6 percent of gross domestic product [GDP]) are high in Argentina, completion rates remain low and quality is lagging. More than half of the

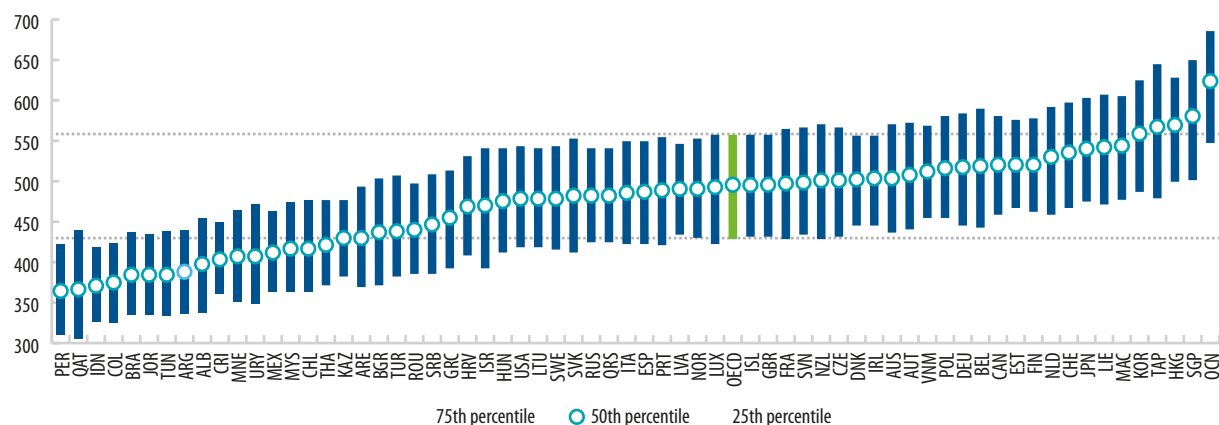
relevant-age students do not finish secondary education (World Bank 2015b), and the rate of enrolment falls significantly after 15 years of age (particularly for boys) (figure 3.15). Internationally comparable test score data show that Argentina underperforms relative to its peers both at the primary and secondary level. Almost 4 out of 10 students have the lowest performance in reading tests by the third grade. By age 15, two-thirds of children are not able to solve basic math problems, and half cannot interpret basic texts. The median Argentine performs in mathematics at an equivalent of 2.5 years below the average of OECD countries (figure 3.14).<sup>11</sup> More worrisome, test scores stagnated at the same time that spending was increasing, pointing toward increase inefficiencies as well as to long-term effects in terms of future incomes (World Bank 2015b). Estimates suggest that Argentina could raise its average growth rate by two-thirds if it were able to increase its cognitive skills to match those in peer countries.<sup>12</sup>

11 According to PISA scales: 41 points in mathematics are equivalent to having an additional year of formal education.

12 Calculations based on OECD (2010, 2018). OECD (2010) presents a model of economic growth on workers' cognitive skills (C), years of schooling (S) and initial GDP, estimated from the OECD countries database. Cognitive skills are proxied using the average PISA test score between math and science. The resulting equation is  $\ln Y = \alpha + \beta_1 C + \beta_2 S + \beta_3 \ln GDP + \epsilon$ . This means that one standard deviation change (100 PISA points) raises annual growth rate of per capita GDP by 1.74 percentage points. Applying this model to Argentina assumes that the relationship between covariates and per capita growth is similar to the average of OECD countries.



**Figure 3.14:** Test scores in mathematics, 25th, 50th, and 75th percentiles, selected countries (OECD average in shaded area), Program for International Student Assessment 2012 (PISA)



Source: World Bank 2018b, based on PISA 2012.

Note: The lines represent the interquartile range of test scores.

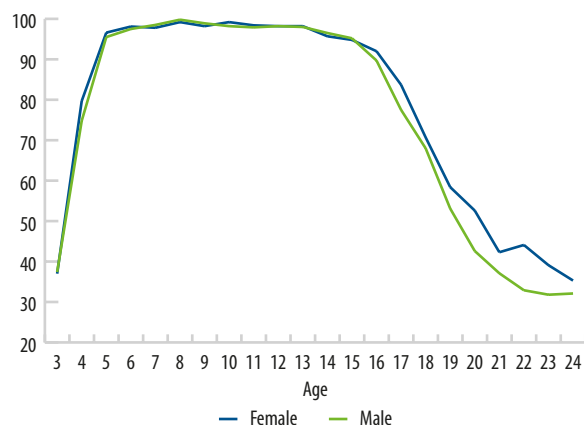
Quality is deficient at all levels of the educational system, and early deficiencies accumulate over time. School readiness and early literacy skills are low, hampering children's educational development in later years and perpetuating inequality across generations. Although coverage of early childhood education (ECE) (ages 4–5) and the first cycle of primary education are high, quality remains low, as expressed in low test scores in early grades. Ensuring children are off to a good start by improving school readiness and early literacy is key to create a strong platform for later years.

In addition, access to quality education is highly unequal across socioeconomic groups and place of residence, limiting mobility across generations. Students from poorer backgrounds are six times more likely to have low educational attainment in science than those from richer backgrounds, a difference that is twice as high as in advanced economies (OECD 2017b). Of all Latin American countries, Argentina is the one in which the socioeconomic status of the family most influences learning outcomes (Ferreira et al. 2013). Primary school students from a poor background are over three times more likely to perform below the basic standard in math than those from a richer background, and these differences worsen as the child progresses in the educational system (figure 3.16) (Ministerio de Educación y Deportes 2017).

Finally, the education system does not adequately prepare students for entering higher education or the labor market. Low completion rates reflect, in part, the fact that the secondary model has limited relevance given current skills needed, lowering the benefits of remaining in school and restricting future insertion in high-productivity jobs. In addition, the limited quality of basic education has resulted in high school graduates who are poorly prepared for higher education, which in turn translates into low completion rates and high time-to-degree indicators. Argentina ranks poorly among the countries in the region in terms of these two indicators (World Bank 2018b). The rapid expansion of higher education over the past 10–15 years disproportionately benefitted students from the left-tail of the distribution. However, many of these students are the first generation in their families to access higher education, are poorly informed about higher education programs and returns, and are particularly academically unprepared for higher education, limiting the equalizing effects of the expansion in coverage. Global evidence suggests that, in this context, the increased access might translate mostly into poor completion rates and low—and in some cases even negative—returns to higher education. True equality of opportunity requires not only improving access to tertiary education but also supporting strong remedial and developmental programs. Even more important and



**Figure 3.15:** Share of children who attend school, by age, 2016

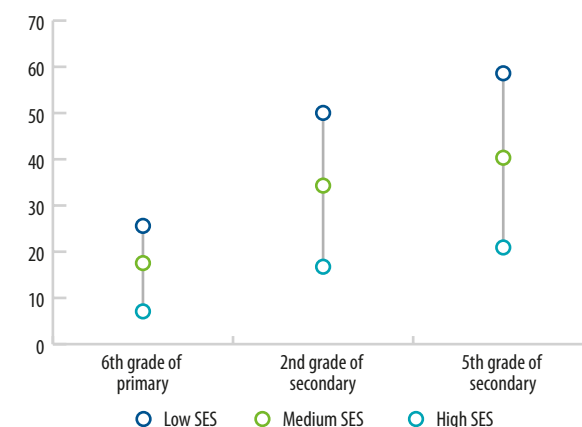


Source: Calculations based on data from SEDLAC (CEDLAS and World Bank)/.

cost-effective would be to level the playing field in early and basic education.

Improving learning will require a combination of measures at all levels of the educational system. Improving the quality of ECE and early math and literacy interventions could have a substantial effect on improved learning outcomes and completion rates later on. A more direct focus on learning calls for strengthening teacher career and professional development, improving both in-service and pre-service training (including the reorganization of thousands of atomized institutes into fewer high-quality centers with stringent standards) to attract the best candidates to the teaching career and to motivate teachers to perform. Revamping secondary education by supporting a switch from a paradigm of acquiring encyclopedic knowledge to one prioritizing critical basic cognitive skills and skills for the 21st century (including socioemotional skills) and rethinking the role of universities would be critical to competing in the economy of the future. This is the cornerstone of the ongoing flagship reform of the secondary model in Argentina, *Secundaria 2030*.<sup>13</sup>

**Figure 3.16:** Share of students with below basic knowledge in math, by socioeconomic status, 2016



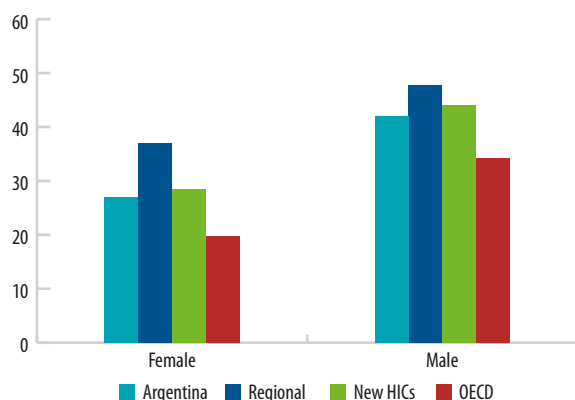
Source: Ministerio de Educación y Deportes 2017.

In addition, enhancing the efficiency of the educational system will call for reassessing the allocation of resources both at the macro (ministry) and micro (school) levels. At the macro level, education policy should be progressively guided by evidence-based decision making to identify cost-effective initiatives that should be scaled up or expanded (or not). This also requires a solid monitoring and evaluation system, and strong management skills for second-tier and intermediate government officials. At the micro level, global evidence identifies school principals' management skills as a priority area of intervention.

Another area where Argentina needs to improve is in noncommunicable diseases (NCDs) and injuries, particularly among men, because they can limit further increases in productivity. NCDs and injuries have become the main burden of disease, potentially generating large productivity losses caused by worker absenteeism, disability, and premature death. Among men, 42 percent of all NCD deaths are among those under 70 years old (whereas the proportion among women is 27 percent) (figure 3.17). Significantly, more adult men than women are likely to be overweight, have high blood pressure,

13 See <https://www.educ.ar/recursos/132104/marco-para-la-implementacion-de-la-escuela-secundaria-2030>. The so-called *Secundaria del futuro* is to be based on a competence approach, comprising six basic competences: (i) problem solving; (ii) critical thinking; (iii) learning to learn; (iv) team cooperation; (v) communication, and (vi) commitment and responsibility. The document also includes achievement for objectives each cycle of schooling, and on project-based teaching and integration of areas and subjects as well as general guidelines for re-organization of learning, teaching, academic regime, and training and mentoring. Regarding teachers, the project promotes concentration of teaching hours in one school, more time for institutional planning and the creation of stable teaching teams. Implementation will be gradual, and each province will follow its own planning.

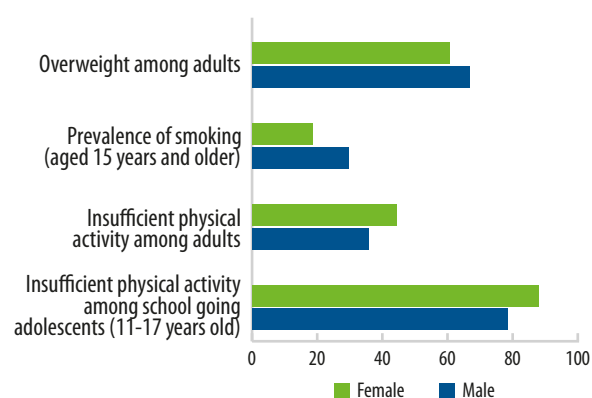
**Figure 3.17:** Proportion of NCD-related deaths under age 70, percent



Source: Data from World Health Organization.

Note: New HICs = new high-income countries; OECD = Organization for Economic Co-operation and Development.

**Figure 3.18:** Risk factors of noncommunicable diseases, Argentina, circa 2015



Source: Data from World Health Organization.

and smoke, despite being slightly more physically active (figure 3.18). In addition, children are increasingly obese and overweight,<sup>14</sup> and Argentina now tops the regional ranking for those under five.<sup>15</sup> Yet a large share of the premature NCD burden can be prevented or controlled through a reduction of common risk factors associated with these diseases, such as unhealthy diets, physical inactivity, and tobacco use and alcohol abuse. Preventive care is particularly deficient among the more vulnerable population, who are more likely to be exclusively covered by the public health system. Those patients are less likely to have cervical cancer screening (60 percent compared to 72 percent of the rest of the population), receive mammographs among women aged 50–70 (48 percent versus 66 percent), and have a high blood pressure control test (71 percent versus 82 percent). A shift of resources toward prevention and treatment of NCDs will be required (World Bank 2017d).<sup>16</sup>

Despite improvements in the past 15 years, there are large inequalities in health outcomes across income levels, migration status, and geographic location. In addition to

differences in basic infrastructure services (such as water and sanitation), differences in health outcomes reflect the existence of a fragmented system in which those with access to the contributory social health insurance get more effective services, at least for prevention and control of chronic diseases, than those who rely on the public system. Given that access to different health systems is associated with labor market status, there is a strong relationship between socioeconomic status and services provision: whereas two-thirds of the overall population have access to the contributory social or private insurance systems, less than 30 percent of those in the poorest quintile do so.<sup>17</sup>

Reducing these spatial and socioeconomic differences in a federal country with a fragmented social system might be achieved by creating incentive mechanisms to enhance coordination and harmonization of standards across providers, as well as by strengthening the existing compensatory instruments. One such example is the experience with the Plan Nacer/Sumar Program, whose objective was to improve health outcomes (particularly

<sup>14</sup> Almost 40 percent of school-aged children is overweight or obese (Source: *Programa Nacional de Salud Escolar 2016* (PROSANE), Ministry of Health), which is more than 15 percentage points higher than in OECD countries (Source: OECD 2015b).

<sup>15</sup> Pan American Health Organization (PAHO)/WHO.

<sup>16</sup> To address this issue, the Argentine government developed and initiated the implementation of the National Strategy for the Prevention and Control of NCDs and Injuries 2009.

<sup>17</sup> Based on Encuesta Permanente de Hogares–Continua 2016 (Instituto Nacional de Estadística y Censos).



maternal mortality and child morbidity and mortality). The program implemented a public insurance strategy and a pay-for-performance scheme in order to solve agency relationships between the Nation and the provinces, and between the provinces and the health facility networks, in turn. By means of such instruments, the idea was to align the priorities of every involved institutional decision-maker and to generate incentives that operate on the teams of healthcare facilities. The impact evaluation of the program showed that it reduced coverage gaps across provinces and improved health outcomes for vulnerable pregnant women and children living in the poorest regions of the country (Gertler, Giovagnoli, and Martinez 2014). The program was successful in increasing the use and quality of prenatal care services and the probability of receiving the tetanus vaccine. As a result, Plan Nacer beneficiaries have seen a reduction in the probability of a stillbirth by 26 percent and the probability of low birth weight by 7 percent.

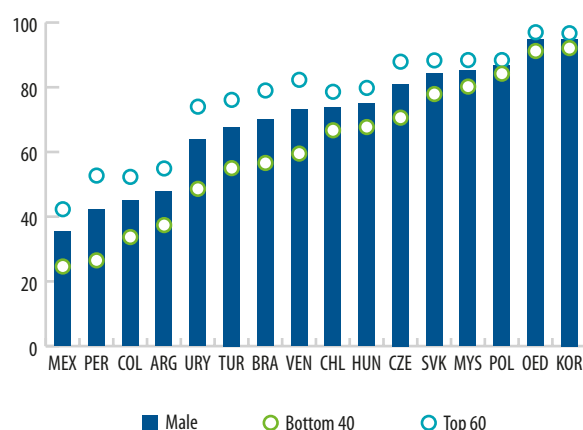
## Improving people's access to markets

Access to financial services in Argentina is low, limiting people's ability to accumulate assets. Less than half of

Argentines report having an account at a bank or other type of financial institution, and that share is only 37 percent among those in the bottom 40.<sup>18</sup> Although higher than in other Latin American countries—such as Colombia, Mexico, or Perú—such access is still too low when compared with new high-income countries (new HICs) where, on average, more than 70 percent of adults have an account (figure 3.19). In addition, although women are more likely to access financial institutions than men (50 percent against 45 percent) and are equally likely to borrow money through formal channels, 71 percent of women say they would not be able to raise emergency funding, compared to 51 percent among men.

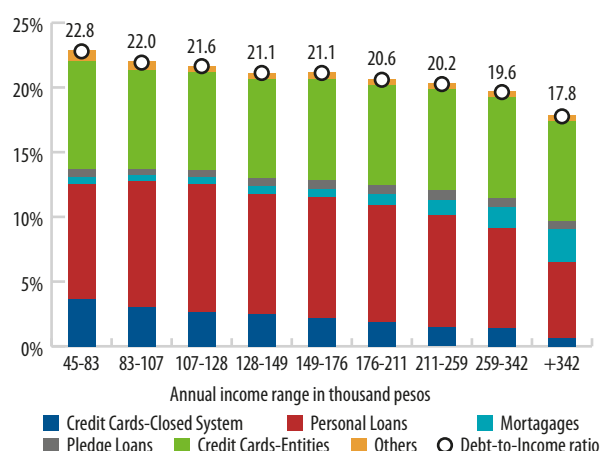
Access to credit (including to mortgages) is scarce and varies largely depending on income, which reinforces existing inequalities. On average, 1 in 5 borrowed from a financial institution, whereas only 1 in 10 did so among the bottom 40.<sup>19</sup> In addition, whereas poorer people tend to rely on personal loans and closed card systems issued by nonfinancial institutions, a high proportion of the credit taken by richer people is through a mortgage (figure 3.20). As a result, the more well-off not only can borrow larger amounts of money and repay over a longer

**Figure 3.19:** Account at a financial institution, percent of age 15+, 2017



Source: Data from Global Findex Database 2017, <https://globalfindex.worldbank.org>.

**Figure 3.20:** Debt ratios and kind of credit contribution, by annual remuneration level, July 2015 to June 2016



Source: Reprinted from BCRA 2016.

18 Data from the Global Findex Database 2017, <https://globalfindex.worldbank.org/>.

19 Data from the Global Findex Database 2017, <https://globalfindex.worldbank.org/>.



period but also pay lower interest rates. On average, only 7.8 percent of Argentines have outstanding mortgage loans (and less than 5 percent of the bottom 40), limiting families' possibility of owning their own home.

Not only households but also firms face difficulties in obtaining finance, particularly small firms that shoulder the brunt of employment and job creation. Improving access to finance, particularly to small firms, is fundamental to increase the firms' productivity. Yet, according to the World Bank's Enterprise Survey (2010), 15 percent of firms in Argentina identify access to finance as the biggest business environment obstacle, behind tax rates (19.6 percent); and 43.5 percent consider it a major constraint compared to 28.4 percent for the LAC average and 26.5 percent for all other countries in the sample. Among female-led firms, the proportion that consider finance a major constraint is even higher, at 57 percent. Lack of finance is substantially worse for small business, and the reported gap between small and large firms is wider than that reported in LAC (one and a half times higher) and all the countries in the sample (three and a half times higher). The differences in access to finance across gender are stark: whereas 52 percent of firms managed by a man have a bank loan or line of credit, only 25 percent of female-led firms do. Similarly, 15 percent of investments in male-headed firms come from banks, compared to 4 percent of investments in firms with a female top manager.

People's access to employment opportunities is also constrained by transport efficiency. In Greater Buenos Aires, the average number of jobs per worker accessible within a one-hour commute depends on the level of income: around richer downtown Buenos Aires it is significantly larger than in the *Partidos* of Greater Buenos Aires (Peralta Quirós and Mehndiratta 2014). This means that those living in one of the poorest areas in Argentina have fewer job opportunities or need to spend more time traveling to have the same number of labor opportunities. The difference based on income is, in part, related to the available means of transport across economic groups. Although most of the users of subway

(metro) are high income, less well-off individuals tend to use a combination of railway and buses. This is the result of the territorial coverage of each means of transport—there are no subways outside the city of Buenos Aires—as well as its affordability. Subways are the most expensive means, whereas trains are the cheapest. Because buses and railways require more time than subways to cover the same distance, and given that jobs are scarcer in poorer areas, these users spend more time traveling, reducing their spare time for other activities.

Women in more vulnerable neighborhoods are specially constrained in their use of public transportation because of issues of security and social norms. Preliminary results of a recent study carried out in Buenos Aires on women's mobility barriers and facilitators show that, in neighborhoods such as Villa 31 and Ejercito de los Andes, security issues influenced women's selection of public transport modes and time to travel, which led in several occasions to longer travels. For example, because of insecurity, some buses that should be traveling inside the neighborhoods preferred to use alternative routes far away from the predefined bus stops, increasing users' exposure to additional security risks. In addition, social norms influence travel behaviors for women. Those with young children prefer to work in their communities to be closer to their children, limiting their options in terms of economic opportunities. Moreover, even when their children reach adolescence, mothers prefer to stay near home to ensure their kids do not get involved in criminal activities, which are more prevalent in these vulnerable neighborhoods. Finally, the study shows that, even if some of the barriers to increase women's mobility depend of the transport sector, such as providing safe and alternative forms of transportations, others need a multisectoral effort (such as childcare provision).

### Making cities livable, inclusive, and productive

Today, Argentina has a system of geographically diverse cities and persistent lagging regions where significant differences in access to basic services prevail. The





proportion of households with unmet basic needs<sup>20</sup> in the northern regions of the country is 15.9 percent compared to a national average of 9.1 percent (INDEC 2010). The past four decades have seen rapid convergence across provinces in the access to basic services such as safely managed sources of water but not in terms of sanitation. In the case of access to water, although households in the northeastern provinces (Chaco, Formosa, Santiago del Estero) have the lowest proportions of coverage, that coverage still reaches 75 percent compared to 99 percent in the city of Buenos Aires. In the case of sanitation, however, the coverage gap is particularly striking: less than a fourth of households in provinces such as Chaco, Misiones, and Santiago del Estero are connected to a sewer, another 60 percent have basic sanitation, leaving between 9 and 21 percent of households with unimproved sanitation services. In the remaining provinces, the latter figure is less than 6 percent. These conditions increase families' sanitary and environmental risks, worsening their social vulnerability, and increasing their exposure to illnesses such as respiratory disease, diarrhea, and iron deficiency (World Bank 2017e).

The population growth in urban areas has not been accompanied by adequate investments in infrastructure and services, leading to growing informal settlements, sprawl, congestion, pollution, and crime, all which exacerbate social exclusion. Agglomerations in Argentina have experienced high and increasing levels of sprawl, with the sprawl index<sup>21</sup> increasing from 1.4 in 1990–2001 to 2.3 in 2001–10 (figure 3.21). In many cases, this has resulted in low-density, fragmented, and spatially segregated cities, characterized by isolated high-income gated communities and low-income informal settlements marginalized in the city's peri-urban areas. The spatial inequality that arises is reinforced by failures

in housing and transportation policies. As a result, growth opportunities are being lost: evidence indicates a negative and statistically significant effect of sprawl on economic density. A denser city would also reduce the cost of basic infrastructure provision, contributing to reduced territorial disparities. In places such as the Metropolitan Area of Buenos Aires (Area Metropolitana de Buenos Aires, AMBA) or Santa Rosa, access to sewage network is almost universal at the core of the agglomeration, but it is below 60 percent for the peri-urban areas (figure 3.22) (Muzzini et al. 2017). The rise in the quantitative housing deficit between 2001 and 2010 has led to an increase of informal settlements. It is estimated that 17 percent of the population lives in one of the 4,000 vulnerable settlements in the country, mostly located in peri-urban areas.<sup>22</sup> Whereas barriers to housing finance have been a binding constraint over the past decades, Argentina also faces supply-side constraints that limit access to affordable housing. Finally, air pollution in cities such as Buenos Aires (factors of six), Cordoba (factor of three) and Mendoza (factor of two) are a multiple of the World Health Organization's recommended threshold (World Bank 2016a).

Climate change and environmental degradation pose a growing challenge to Argentine cities. Urban flooding is recurrent in AMBA, particularly for those living in the outskirts. A recent study estimates that 236,000 people in the three main basins around AMBA cannot cover the basic consumption basket of goods and services, making them highly vulnerable to impacts of flooding (CABA 2013). The recurrent flooding in the Autonomous City of Buenos Aires (CABA) has a negative impact on the livelihood of its 3 million inhabitants and its more than 2 million daily commuters—who come to the city to work, study, and access health institutions. Disruption

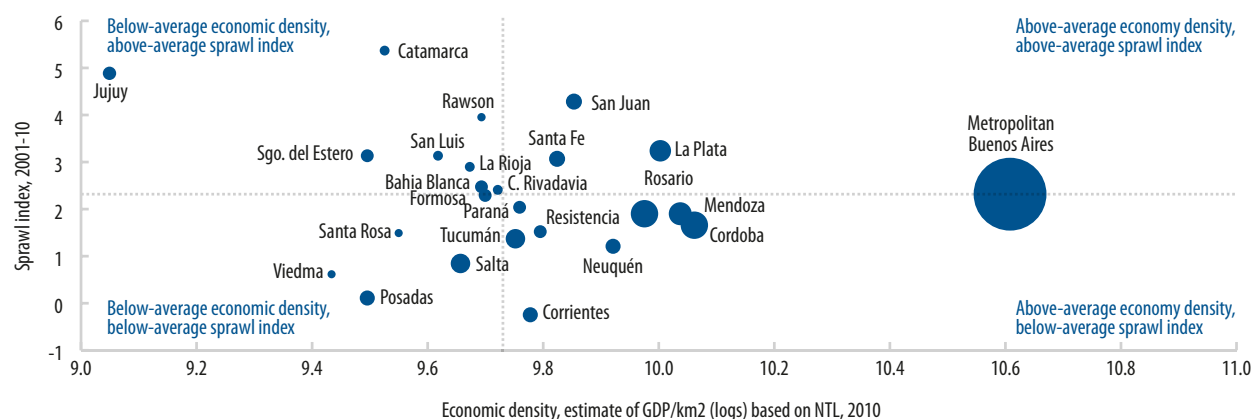
20 These are households meeting at least one of the following criteria: (1) precarious housing; (2) no access to private toilet in their dwelling; (3) living in conditions of overcrowding; (4) at least one child between ages 6 and 12 does not go to school; and (5) the household head did not finish primary school and there is a ratio of four to one per employed member (INDEC 2010).

21 The sprawl index measures the increase in the built-up area relative to a benchmark where the urban built-up area would have increased in line with population growth. In Argentina, this is measured in 26 agglomerations. The sprawl index is equal to zero when both population and the urban built-up area are stable over time. It is greater (or smaller) than zero when the growth of the urban built-up area is greater (or smaller) than the growth of population, that is, the city density has decreased (or increased).

22 Refers to *Barrios Populares*, defined by the government as at least 8 families grouped, where more than half of the population does not have the land title or regular access to two or more basic services (water network, electrical network with meter and/or sewerage network). *Relevamiento Nacional de Barrios Populares*. December 2016. *Jefatura de Gabinete de Ministros*. <http://datos.gob.ar/dataset/barrios-populares-argentina>



Figure 3.21: Sprawl and agglomeration economies



Source: Reprinted from Muzzini et al. 2017.

of transportation systems<sup>23</sup> has a considerable negative impact particularly on the livelihood of those living in the outskirts (an estimated 47 percent of all commuters belong to the lower quintiles of income). Over time, many natural runoff systems have been covered up or “tubed” and are now blocked, increasing the risk of flooding. The combination of urban flooding and riverine flooding increases the risk manifold. In recent years, more than 200 housing developments have been built in the floodplains of the Parana Delta near Buenos Aires. These constructions prevent the natural runoff of water that would cushion the impact of floods, increasing the risk of urban flooding in the metropolitan area.

Solid waste management is also an important problem, with approximately 4 million inhabitants without regular collection services, particularly in slums (14.3 percent not covered). Open dumps remain the most common mode of disposal in Argentina, particularly in poorer communities: nearly 90 percent of the municipalities dispose of waste in open or semicontrolled dumps without adequate sanitary controls (World Bank 2016a).

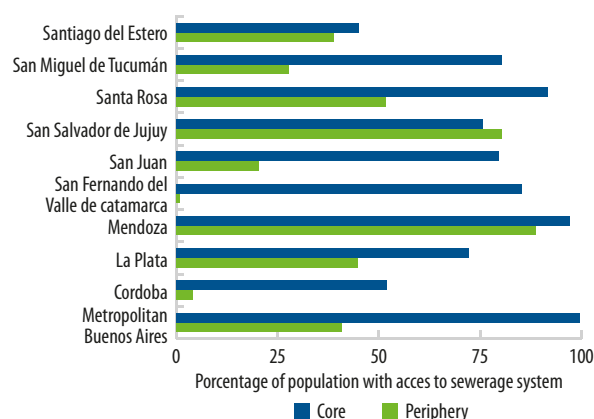
Lack of integrated planning in urban areas has prevented efficient and sustainable urban growth, limiting the potential of cities to contribute to the country’s long-term prosperity. Although in development, a national framework to guide urban development does not yet exist.<sup>24</sup> Provincial governments usually have weak regulatory frameworks to oversee municipal land use planning. Municipalities are responsible for land use planning, but they typically do not use all available planning tools to guide development of their territory partly because many of them lack capacity or incentives to update land use regulations. The limited responsibilities delegated by provinces to municipalities often prevent municipalities from integrating land use planning with transport systems and from carrying out long-term planning for public works, for which responsibilities are fragmented across tiers of governments. Successful urban policies are typically integrative of a wide range of sectors. Integrated planning across different sectors is critical to (i) ensure that investments have a greater impact at the city level, enhancing inclusive economic growth; (ii) optimize scarce resources to ensure that long-term objectives

23 In April 2013, CABA experienced one of the heaviest storms recorded in nearly 50 years, resulting in key transportation routes being submerged and mass-transit system shutdowns. Power outages lasted for as long as 15 hours in many neighborhoods and up to several days in a few others. Direct damages and losses of this event amounted to US\$300 million. In addition, fiscal impacts (subsidies and tax exemptions) of severe weather events are important—the events recorded in April 2012 and April 2013 were estimated to result in a US\$49 million budget impact. Logistics disruptions also had a negative impact on the overall economy.

24 The government of Argentina is currently working on the “Política Nacional Urbana y del Hábitat” but has not yet implemented it.



**Figure 3.22: Access to sewerage network: core urban areas vs. periphery, 2013, percent**



Source: Reprinted from Muzzini et al. 2017.

and sequencing are coordinated across sectors; and (iii) optimize impacts on poverty and inequality. Enhancing coordination of urban policies at the municipal and metropolitan levels and promoting sustainable growth through improved housing policies and urban mobility will be essential to improve the livelihoods of the urban poor. A more equal provision of basic services such as water, wastewater infrastructure, and drainage would require widening and strengthening the financing options, such as developing clear mechanisms to set up a transparent system of fiscal transfers to provinces (with an opportunity, for example to design them with “performance based” criteria) (Muzzini et al. 2017).<sup>25</sup>

## Strengthening social protection for a more inclusive society

Argentina’s fiscal system is one of the most redistributive among developing countries and some new HICs. The difference in the Gini coefficient between the market

income and the disposable income in Argentina is larger than countries such as Chile, Mexico, the Republic of Korea, or Turkey, but still lower than most OECD countries (figure 3.23).<sup>26</sup>

The large redistributive capacity is mostly due to a strong social transfer system (especially pensions), in a context of limited labor policies, regressive energy subsidies, and low direct taxation relative to peers. Argentina’s social security system is a combination of contributory and noncontributory systems. Pensions, family allowance, and unemployment insurance are partially funded through payroll contributions (from employees and employers), although general revenues are often needed to cover the deficit. The reforms since the mid-2000s toward the extension of benefits to the uncovered population through the noncontributory family allowances (AUH), the two pension fund moratoria, and the new noncontributory pension represent an increasing burden to the system.<sup>27</sup> Yet these transfers substantially reduce poverty and inequality, even to a larger extent than other countries in the region. Unemployment benefits play a small role in reducing poverty and inequality because their coverage is limited (about one-tenth of unemployed, mostly nonvulnerable), and the benefit is low. Subsidies to energy consumption and transfers remain sizeable and regressive -more than half go to the richest quintiles. Yet, recent reforms toward reducing these subsidies while creating a social tariff to protect the most vulnerable should eventually improve its incidence, although this might not be immediate (Lakner et al. 2014; Puig and Salinardi 2015; Giuliano et al. 2018). Direct taxes are close to the average of regional peers but significantly lower than OECD countries. An extremely high-income tax threshold (at five times the average income) and low levels of compliances, combined with a poorly progressive social security system with high contributions (at 35

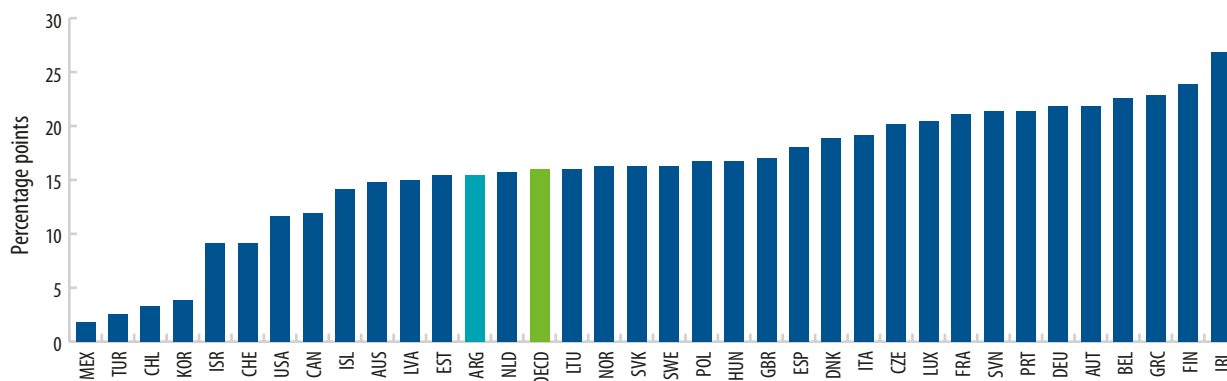
25 This is key in the AMBA context, where managing water within administrative boundaries of municipalities often impedes a more integrated management of water considering the basin, and ignores the upstream–downstream links. This requires better institutional coordination (concept of integrated urban water management).

26 Lustig (2017) and OECD (2017a) both present international comparable estimates of the size of redistribution, and in most cases the rankings are similar.

27 The pension fund moratoria allowed workers with insufficient years of contribution to declare their work history in the informal sector, but gain access to a pension that includes a penalty related to the noncontributed years. In 2016, a universal noncontributory pension system was installed to avoid the need for future moratoria. The pension received is equivalent to 80 percent of the minimum contributory pension benefit.



**Figure 3.23: Redistribution: Reduction in the Gini coefficient through taxes and transfers, latest available year, percentage points**



Source: Reprinted from OECD 2017a.

percent) in a context of high informality, result in a limited redistributive impact of direct taxation (OECD 2017a).

Noncontributory transfers (especially AUH) play an important role protecting the most vulnerable, but 0.5 million children out of 13 million are still excluded from the benefit. Conceived to universalize the allowances to families that do not contribute to the formal system, the AUH turns out to be effective in reaching the most vulnerable, with no substantial negative impact on labor participation.<sup>28</sup> With a fiscal cost of approximately 0.5 percent of GDP (one of the highest in LAC), the AUH reaches 3.9 million children and distributes over 80 percent of its transfers to the bottom 40 percent of families (Cetrángolo et al. 2017). Given the size of the transfer (equivalent to a child's food basket), AUH is insufficient to lift families out of poverty—only a tenth of beneficiary families have been able to do it.<sup>29</sup> In addition, 4 percent of all children are currently not covered by either the contributive or the noncontributory family allowance system. Coverage gaps are due to different factors—including delays or lack of necessary documentation, the noncompliance of

co-responsibilities, and the existence of nontraditional household arrangements—that might disproportionately affect those that are most excluded in the society (Davolos and Beccaria 2017). Larger efforts are needed to solve administrative problems and to better understand the socioeconomic situation of uncovered households to better design policies to close the gap.

Because of the limited and weak policies directed to central ages, the social protection system might be insufficiently prepared to deal with the transition to an outward high-productivity model. Active labor policies remain limited, and spending on these programs is well below the OECD average (0.05 percent compared to 0.15 percent of GDP). The unemployment insurance is the main instrument available to help cope with the loss of employment. Yet it has limited coverage, particularly for workers in sectors that are likely to lose, where formality is low and, even if those workers are covered, their benefit is lower to those in other sectors because of the lack of indexation of their incomes. Active labor market policies (ALMPs), conversely, have the potential to help retrain and reallocate (through

<sup>28</sup> Maurizio and Monsalvo (2017) do not find any significant effect of receiving AUH on labor force participation or hours worked. Conversely, Garganta and Gasparini (2017) do find a positive impact on wages of informal workers and a small negative impact on hours worked, particularly among vulnerable women (primarily secondary workers), but the effect, while significant, is not large. Yet the authors find evidence of a significant disincentive to formalization of new workers but no informalization of current formal employees. Both studies use nonexperimental techniques given that no randomization of the program was done. They differ, however in the control group use, with the former potentially underestimating the impact and the latter overestimating them.

<sup>29</sup> Estimates suggest that an additional 2.4 percent of GDP would be needed to lift the recipient families out of poverty (official definition) and another 0.85 percent for the poor nonrecipients.



intermediation services) some of those affected by the shift. In the last years, ALMPs have shifted toward the provision of training and intermediation services against direct employment. Examples include *Red de Oficinas de empleo*, *Programa Jóvenes con Más y Mejor Trabajo* (both from the Ministry of Labor), and PROGRESAR (from the social security administration, ANSES).<sup>30</sup> Nevertheless, the absence of a single institution to oversee and coordinate these ALMPs, as seen elsewhere in LAC, becomes more evident in a landscape where private training providers coexist with training centers run by trade unions or directly provided by governments at different levels of public administration. The incidence of the private sector in labor intermediation is even more pronounced than in the case of training. The profit-seeking nature of these (nonpolicy) actions imposes additional barriers (search costs) to labor mobility.

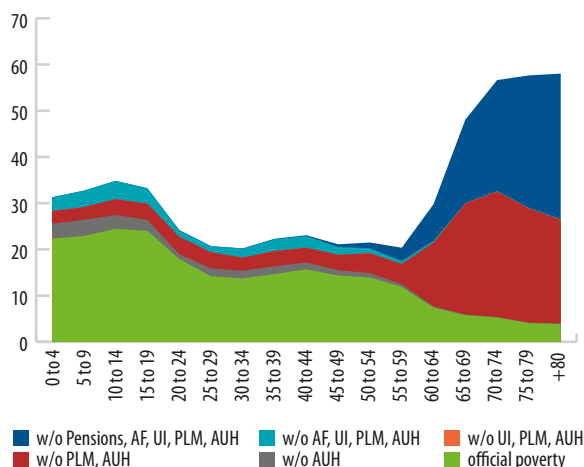
Enhancing interinstitutional coordination of ALMPs will be essential to prevent low coverage and administrative inefficiency given by the multiplicity of institutions implementing these programs. In addition, a consolidation of a national labor training policy would facilitate national surveys of employment demand providing systematic information on what skills businesses need and on the relevance of socioemotional skills both for the more employable population and for those most difficult to place (such as young people who are not studying or working). It would also enable curricula and skills certification to be demand-oriented. Although such interventions are not a panacea, they are often more effective when they combine the various components of such programs (classroom training, internships, development of social and emotional skills, and so on) (World Bank 2013). In terms of intermediation, the use of digital technologies may reduce costs because of both competence and length of search periods for open vacancies. It is unclear, however, whether these technologies may have a differential impact along the whole range of labor qualifications (higher for more qualified workers).

Finally, pensions are fundamental for protecting the income of the elderly population, but pension spending is large and the demographic change will put additional pressure on its fiscal sustainability, maintaining coverage and adequacy. It is estimated that two-thirds of the pension moratorium goes to the poorest three deciles of the income distribution (OECD 2017a). Yet, with more than 11 percent of GDP going to the pension system, Argentina spends a higher proportion of its social public spending on the elderly than do its peers, resulting in differential gaps between the life cycle deficit curves and the net public transfers (figure 3.24 and figure 3.25). This is the result of a high level of coverage, as well as of pension benefit levels that are above its peers. The demographic transition process toward an older population will put pressure on the social security and health/long-term care system for the elderly and its fiscal sustainability. Currently, older adults benefit much more than do children from net per capita public transfers; however, the family allowance program means that this imbalance is much less than exists in other countries (figure 3.26). Estimates, based on National Transfer Accounts calculated for 2010, indicate that future pension expenditure is projected to reach 15 percent of GDP by the 2050s (figure 3.27).

A pension reform that ensures inclusion and equity, while balancing the fiscal burden, will not be straightforward. One option would be to consider a system that combines a universal noncontributory scheme, which provides a basic benefit to all senior citizens who do not reach the minimum required contributions, with a contributory pillar proportional to the number of years of contributions and labor income level. On top of these, a voluntary scheme can also reduce the burden to the system while incentivizing savings. Other reforms include the flexibilization of the retirement age to generate financial incentives that motivate the delay of retirement, even more among those workers with higher productivity. As an important step, Congress passed an adjustment to the current indexation scheme in December 2017.

30 Recent reviews on ALMPs in Latin American countries show that they are particularly effective in increasing formalization, whereas results on increasing the probability of employment or higher earnings are more mixed. Retraining tends to be more effective than help with job search or private sector employment incentives. Results are also better when directed to youth than to older workers (Escudero et al. 2016; Busso et al. 2017; McKenzie 2017).

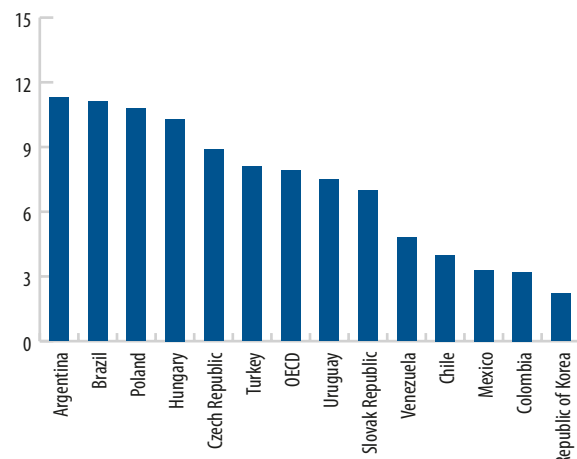
**Figure 3.24:** National poverty incidence by age group, before and after transfer program, percent



Sources: Calculations based on data from SEDLAC (CEDLAS and World Bank), <http://www.cedlas.econo.unlp.edu.ar/wp/en/estadisticas/sedlac/>, *Encuesta Permanente de Hogares-Continua 2016*, extending Rofman and Apella 2015.

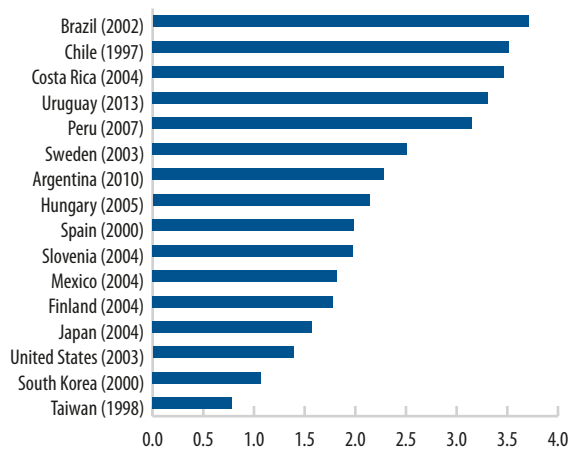
Notes: Poverty rates are calculated excluding each transfer, in a cumulative manner. AF = family allowance; AUH = Universal child benefit; PLM = pension lower than the minimum; UI = unemployment insurance.

**Figure 3.25:** Public pension expenditure relative to peers, percent of GDP



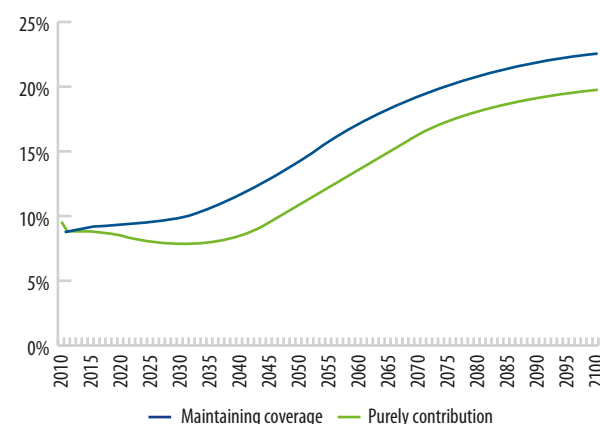
Sources: Data for Argentina, Brazil, Chile, Colombia, Mexico, and Uruguay: Ministry of Finance. Argentina includes provincial expenditure. Rest of the countries from OECD 2015a.

**Figure 3.26:** Ratio of net per capita public transfers between older adults and children



Source: Comelatto (2015).

**Figure 3.27:** Projection of total expenditure on retirement benefits and pensions, 2010-2100, in percent of GDP



Source: Rofman and Apella 2015, using United Nations Population Division data.

Note: Projections are based on the estimation of National Transfer Accounts for 2010, when public expenditure on pensions had reached 9.1 percent, which is several points below current estimates. Hence, the figure should be taken to represent pension spending trends, rather than levels.



## Creating social capital to curb crime and violence

Homicide rates remain low relative to the region, but the incidence of crime is among the highest. Citizens' security remains a high priority for citizens and governments at national and provincial levels. At 6.5 homicides per 100,000 inhabitants, the homicide rate is one of the lowest in LAC—the rate is about 26 homicides per 100,000 in Brazil and Mexico—but it is three times higher than in new HICs and OECD countries (2.7 and 2.0 per 100,000, respectively).<sup>31</sup> Conversely, Argentina's proportion of people affected by any sort of crime (included assault, attack, or other crime) is one of the highest in the region. Whereas on average the victimization rate in LAC is about 43 percent, it reaches 47.1 percent in Argentina (Jaitman 2017).<sup>32</sup> Young men particularly bear a disproportionate share of the risk of committing crimes, with important repercussions for their life trajectories and society as a whole (INDEC 2017). Violence against women and girls is on the

rise, negatively affecting women's opportunities for development. The latest Victimization Survey (INDEC 2018) provides some sex-disaggregated data, showing that men and women report similar levels of having been victims of nonviolent crime, whereas more women (12.7 percent) than men (9.3 percent) report having been victims of violent crime. In terms of perceptions, 85 percent of Argentines declare that insecurity in their cities is a serious or very serious problem (particularly among women), and less than half feel safe walking around their own neighborhood. Importantly, about 45 percent believe that insecurity has worsened where they live.

Among factors that affect people's increased sense of insecurity is the fact that the identification of drug-selling points increased considerably during the period 2010–15.<sup>33</sup> The percentage of people who answer that drugs are sold in their neighborhood rose from 30.2 percent in 2010 to 46.8 percent in 2015. Even though this pattern was observed across different types of neighborhoods, the

### Box 3.2. *Ni una menos*

*Ni una menos* means “Not one [woman] less” in Spanish and comes from a phrase coined by the Mexican poet and activist Susana Chávez in 1995—“*Ni una muerta más*”—used during protests against female homicides in Ciudad Juárez. Chávez was assassinated in 2011, and the phrase became a symbol of struggle.

In Argentina, the *Ni Una Menos* movement began in 2015 to protest GBV and stop femicides (see [www.niunamenos.com.ar](http://www.niunamenos.com.ar)). The movement was started by a group of Argentine female artists, journalists, and academics, and spread across Latin America. A May 2015 protest became massive when Chiara Paez (14) was found, beaten to death and a few weeks pregnant, buried under her boyfriend's house. By June, the request for female safety was present in huge demonstrations in front of the Argentine Congress. Following this, street demonstrations also sprang up in other countries in the region—such as Bolivia, Chile, El Salvador, Guatemala, Mexico, Paraguay, Peru, and Uruguay—and in Spain, giving the movement a greater international momentum. *Ni una menos* was able to establish in public and political agendas themes such as femicide, gender gaps and roles, harassment, legality of abortion, and sex worker and transgender rights.

31 Data from the United Nations Office on Drug and Crime, <http://www.unodc.org>.

32 The victimization rate is defined as the percentage of the population that claim to have been assaulted, attacked, or the victim of a crime in the past 12 months.

33 Bonfiglio, Rival, and Rodríguez Espínola (2016) based on *Encuesta de la Deuda Social Argentina*, UCA.





rate grew faster in slums and low-income neighborhoods. Whereas the prevalence was about 25 percent in high-class neighborhoods, it reached 80 percent and 65 percent in the informal settlements and vulnerable neighborhoods, respectively.

Conversely, the majority of crimes are not reported to the authorities mainly because of public mistrust.<sup>34</sup> About two out of three crimes against people were not reported, and half of them were not reported because victims do not trust authorities. Among those who reported a crime, more than half are unsatisfied with the way the authorities handled the report. Most often, the victim felt that authorities were not sufficiently interested in the case. Four out of five people believe that protection against crime is not ensured or, at least, not satisfactorily (Latinobarómetro 2015), which is more than ten points higher than in countries such as Brazil, Colombia, or Colombia.

Although data on gender-based violence (GBV) are scarce, the few available figures show an alarming situation, mainly for women who lack economic autonomy.<sup>35</sup> In its first two years of operation (2013–14), the free phone line created to provide information, orientation, and support to women victims of GBV received more than 60 thousand calls. In 2016, about 100,000 cases of GBV were registered, and in most cases (98.4 percent) the perpetrator was the partner.<sup>36</sup> In fact, the Argentine Supreme Court reported 254 victims of femicide, of whom 164 were killed by their partner or ex-partner in 2016.<sup>37</sup> An overwhelming majority of cases of GBV are related to domestic violence and to repeated situations of violence already registered in the system. Women survivors of intimate partner violence find that one of the

main obstacles to removing themselves from the situation is lack of economic autonomy: often their only source of economic support is the perpetrator himself. For example, half of the women who reported living in a relationship in which violence is prevalent did not work or have any source of independent income.<sup>38</sup> Box 3.2 summarizes the recent *Ni una menos* movement to protest GBV in Argentina.

Different institutions collect data on GBV; however, there is an important challenge in integrating and harmonizing the information, and the reporting rates are presumed to be underestimated. Institutions that collect data include the Supreme Court of Justice, the police, the Observatory of Femicide “Adriana Marisel Zambrano,” and the National Institute of Statistics and Censuses. There are several challenges in collecting accurate and complete data on GBV. Under-reporting is a serious issue: many sources of information on GBV depend on the reporting of the episode, which may not occur because of the victim’s lack of confidence, economic autonomy, trust in authorities, or knowledge about reporting processes.<sup>39</sup> From the service providers’ side, problems include the lack of knowledge and clear protocols on accounting for what activities constitute an act of violence, and harmonized variables and institutional coordination that would allow for a more systematic, integrated collection of data at a national level.

34 People are considered crime victims when they have been victims of a violent theft, pickpocketing, fraud, bank fraud, physical aggression, threat, sexual harassment, or was asked for a bribe by a public agent (INDEC 2017).

35 The UN Declaration on the Elimination of Violence against Women (1993) defines GBV as any act that “results in, or is likely to result in, physical, sexual or psychological harm or suffering to women, including threats of such acts, coercion or arbitrary deprivations of liberty, whether occurring in public or in private life.” As it generally impacts more negatively on women and girls, “GBV” is often used interchangeably with the term “Violence against Women” (VAW).

36 National Action Plan for Prevention, Assistance and Eradication of Gender-Based Violence for Argentina 2017–2019.

37 The 254 registered femicides in Argentina compare to 34 in Chile; and the 164 murders by an intimate partner compare to 122 in Colombia, 16 in Uruguay, and 30 in Spain. See ECLAC, <https://oig.cepal.org/es/indicadores/muerte-mujeres-ocasionada-su-pareja-o-ex-pareja-intima>.

38 National Action Plan for Prevention, Assistance and Eradication of Gender Based Violence for Argentina 2017–2019.

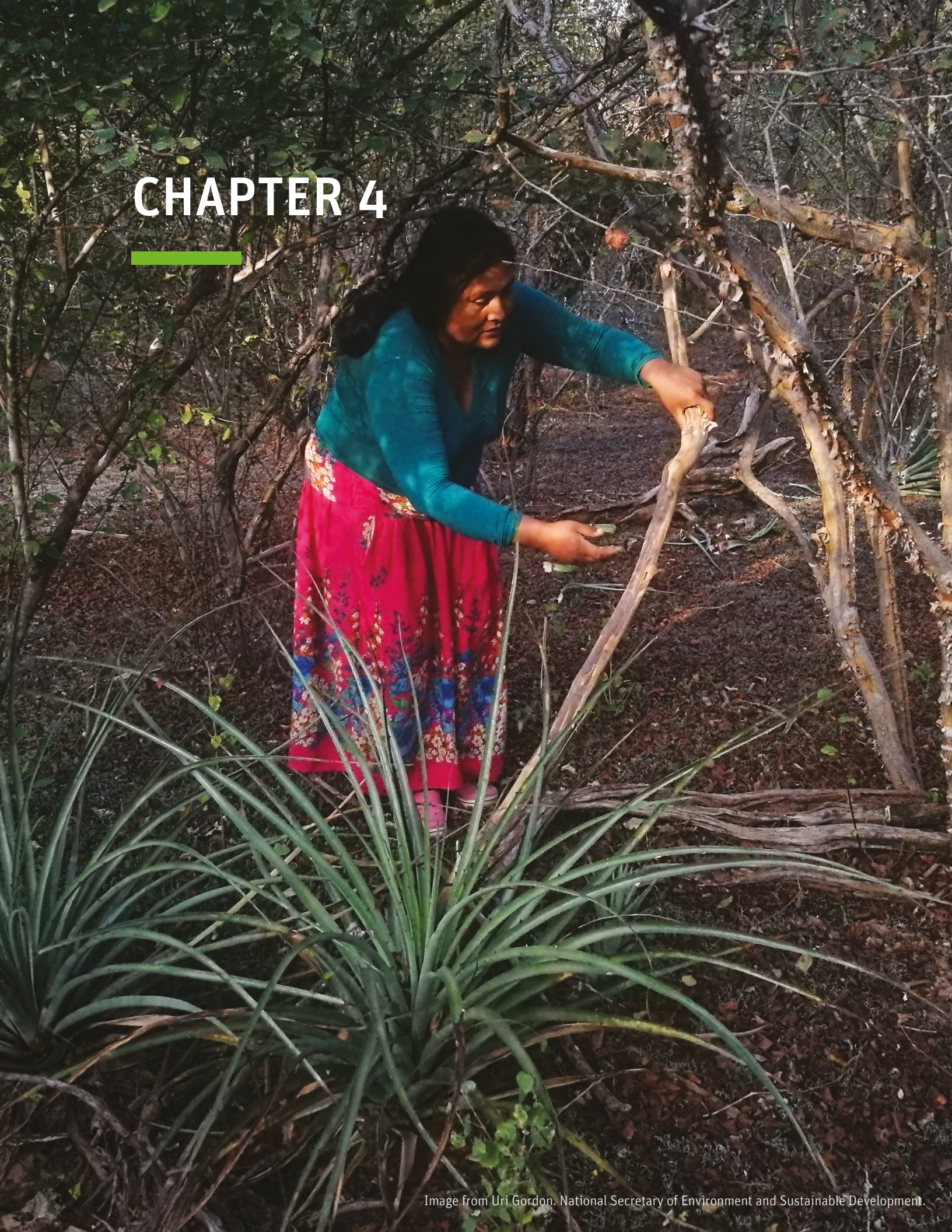
39 Frequently, the violence module of the standard Demographic and Health Surveys measures the prevalence of GBV, and can be used to benchmark across countries and regions. In the case of Argentina, this instrument has not been used.





# CHAPTER 4

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# SUSTAINABILITY AND INVESTING IN NATURAL CAPITAL

## Overview of challenges and institutional context

This Systematic Country Diagnostic (SCD) stresses the importance of fiscal, environmental, and social sustainability aspects of Argentina's growth and poverty reduction efforts. Achieving the twin goals of reduced poverty and shared prosperity in the short term, but at the cost of sacrificing those same goals in the future, is a trade-off Argentina does not want to make. Therefore, sustainability analysis must reconcile the short and the long term, and must take into consideration both current and future generations. Fiscal and social sustainability have been at the core of the discussion on the growth and inclusion pathways. This chapter identifies natural capital as a key driver of sustainability in the efforts to achieve the twin goals over the longer term. It focuses on three key sets of issues: (i) management of natural capital; (ii) achieving climate smart development; and (iii) addressing diseconomies originating from pollution. As will be shown in the next pages, the three defining characteristics set out in chapter 1—resource abundance, aspirations of the middle class, and unequal federation—play out through the degradation of key assets such as land, forests, and fisheries, and by producing diseconomies and poor environmental quality in sprawling urban centers.

Argentina faces several environmental and climate change-related challenges that must be addressed to sustain inclusive economic development and job creation in the future. Natural resources are facing severe pressures from anthropogenic activities that constitute

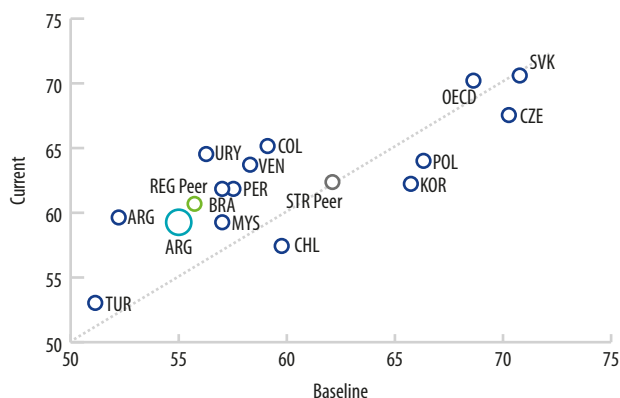
a threat to the sustainability of the development model the country has followed. Soil-degrading agricultural practices, overexploitation of fish resources, water degradation, and pollution are putting at risk productive assets and affecting people's quality of life. Deforestation and habitat fragmentation are driving loss of biodiversity and reducing forest resources at alarming rates; intensive agricultural practices risk depleting soils; pollution of air and water threaten human health; ineffective solid waste management affects quality of life; increased frequency and intensity of climate impacts pose severe risks by accentuating the effects of ecosystem degradation such as floods and severe droughts; and pollution due to untreated effluents, groundwater depletion in water stressed areas, or impacts from glacial retraction are degrading water resources. Furthermore, an adequate Environmental Impact Assessment (EIA) framework with minimum standards at the national level is missing and capacities to mitigate risks from investments are weak.

The federal system imposes complexities in natural capital management. Management of natural resources in Argentina takes place within a complex legal and institutional architecture. Provinces retain sovereignty over the management of natural resources in their territories and over enforcement, and the role of the federal government is to inform decision making by proposing guidelines and standards for provincial level policy formulation and implementation. In fact, the Argentine National Constitution vests the Congress with the power to enact rules setting forth "minimum standards for environmental protection." The Federal Council of Environment (COFEMA), or the Federal Hydrological Council (COHIFE) in the case of water issues, serves as a space to discuss environmental issues and find solutions in a coordinated way. However, the COFEMA does not have formal power or the resources to ensure compliance, which has historically hindered its ability to promote sustainability and avoid environmental degradation in provinces and municipalities.<sup>1</sup> Meanwhile, there is lack

1 In the case of water, the resources cannot be effectively managed at the basin level. There are basin councils in specific cases, but the fact that provinces have the legal jurisdiction over the resource adds a layer of complexity. Current conflicts on Rio Atuel between Mendoza and La Pampa, related to water scarcity, have reached the supreme court. There are also conflicts in El Salado river basin, between Santa Fe and Buenos Aires, La Pampa, related to flooding.

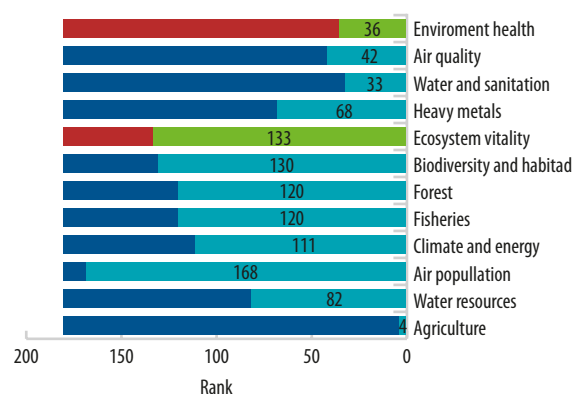


**Figure 4.1.** Enviroment Performance Index score, 2018



Sources: Data from Yale CELP 2018, <https://epi.envirocenter.yale.edu/epi-topline>.  
Note: Current scores are based on most recent year of data available, and baseline applies to data roughly one decade prior.

**Figure 4.2:** Argentina's ranking across dimensions of Environmental Performance Index, 2018



Sources: Data from Yale CELP 2018, <https://epi.envirocenter.yale.edu/epi-topline>.  
Note: Current scores are based on most recent year of data available, and baseline applies to data roughly one decade prior.

of a strong information system about the state of the environment to inform decision making and allow for planning, monitoring, and enforcing regulations. This is reflected in the lack of clear priorities at the federal level.

As a result of these challenges, Argentina's environmental performance is low in relation to countries with a similar level of income and worse than that of its regional and structural peers. The Environmental Performance Index,<sup>2</sup> covering environmental health (which measures threats to human health) and ecosystem vitality (which measures natural resources and ecosystem services), ranks Argentina 74th (with a score of 59.30) among 180 countries in terms of overall environmental performance, below most of its peers except for Malaysia (which ranks 75th with a score 59.22), Chile (84th; 57.49), and Turkey (108th; 52.96) (see figure 4.1). Argentina ranks worst in terms ecosystem vitality (133rd) (figure 4.2). In addition, although overall environmental performance improved in recent years, it improved less than in most regional peers. Argentina went from 80th to 74th, whereas Mexico climbed 24 places (going from 96th to 72nd), Uruguay climbed 25 places (going from 72nd to 47th), and Colombia climbed 13 places (going from 55th to 42nd).

The SCD identified several environment-related priority issues. These include (i) forest, land, and natural capital depletion; (ii) the increasing severity and frequency of extreme events (including the likely impact of climate change in worsening future disasters and economic conditions in key development sectors); and (iii) pollution management, including the low capacity to manage risks in the oil, mining, and infrastructure sectors. These issues have both short-term and long-term aspects, and they threaten Argentina's achievement of poverty reduction and shared prosperity in the longer time frame. To illustrate this, this section will analyze the relationship between these various environmental sustainability issues and the twin goals.

### The role of natural capital in Argentina's economy

Argentina has abundant natural capital, but there is still important scope to turn that capital into an engine of sustained growth and employment creation. Natural capital has been a key driver of growth in the past. By

<sup>2</sup> The 2018 Environmental Performance Index scores 180 countries on 24 performance indicators across 10 issue categories covering environmental health, which measures threats to human health, and ecosystem vitality, which measures natural resources and ecosystem services. These metrics provide a gauge at a national scale of how close countries are to established environmental policy goals.



the second decade of the 20th century, Argentina had increased its income per capita by 190 percent, compared to its level in 1870, reaching levels above those of Italy, Portugal, and Spain. The country's comparative advantage in beef and wheat, and its trade openness, contributed to this performance. However, although growth continued in some resource-rich countries over the later decades of the 20th century, Argentina's performance diminished. Whereas in 1870 Argentina had a level of income similar to that of Canada, Finland, Norway, and Sweden, by 1990 its income was between two and three times lower (table 4.1). There is a large literature showing empirically the so-called resource curse, which shows how natural capital-rich developing countries have grown more slowly than other developing countries;<sup>3</sup> some authors have stressed how "natural resources are neither curse nor destiny" (Lederman and Maloney 2007).

Natural capital in Argentina includes agricultural soils and pastures, water, forests, fisheries, strong winds and solar potential, and subsoil assets (oil, gas, coal, and minerals). Conservative estimates<sup>4</sup> suggest that renewable natural capital, captured in the value of agricultural land, forest land and protected areas (thus excluding, given lack of data, many other resources such as fisheries) represents about 10 percent of Argentina's total wealth (Lange, Wodon, and Carey 2018). This puts Argentina in the top quartile on the list of regional and

structural peers, following Turkey (26 percent), Peru (16 percent), and Brazil (15 percent). Moreover, Argentina has more than 20,000 cubic meters per capita of water availability, making it a water-rich country. Most of the population lives in water-abundant areas (but important agricultural activities in water-scarce areas are vulnerable to inefficient water management and climatic variability). Of course, natural capital also includes nonrenewable resources such as oil, gas, coal, and minerals. Insufficient data on potential future rents for Argentina, particularly related to the shale oil and gas reserves in Vaca Muerta, in Neuquén province, do not allow a similar comparison for total natural capital.

Soil productivity and abundant water underpin agriculture, a traditional driver of economic growth. Argentina has taken advantage of its abundant fertile land to develop a strong agriculture sector that has historically represented a key engine of growth for the country. Although growth in the country has slowed in the second half of the 20th century, Argentina ranks among the top countries in the world for production and exports of key commodities such as soybeans, soybean oil, lemons and limes, maize, and wine (table 4.2). Agriculture value added contributed on average 7.5 percent to the gross domestic product (GDP) between 2010 and 2016, and food<sup>5</sup> exports represented on average 55.4 percent of merchandise exports in the same period, significantly higher than the contribution

**TABLE 4.1. EVOLUTION OF INCOME PER CAPITA, 1870–1990**

	1870	1913	1990
Argentina	1,311	3,797	6,581
Canada	1,620	4,213	19,599
Finland	1,107	2,050	16,604
Norway	1,303	2,275	16,897
Sweden	1,664	3,096	17,695

Source: Bravo-Ortega and De Gregorio 2007, based on data from Maddison 1995.

3 The most influential article in this literature is probably Sachs and Warner (1995).

4 The numbers for Argentina likely underestimate the value of pasture land, given the relative importance of cattle production compared to poultry, eggs, milk and pork. Rental rates used to estimate pasture land are based on a world average of these factors across the dataset.

5 Food comprises the commodities in Standard International Trade Classification (SITC) sections 0 (food and live animals), 1 (beverages and tobacco), and 4 (animal and vegetable oils and fats) and SITC division 22 (oil seeds, oil nuts, and oil kernels).



of agriculture to its peers' economies (Calzada and Frattini 2017). The agroindustry value chain contributes significantly to employment, accounting for one out of six jobs (FADA 2017). The primary sector represents 46 percent of jobs in the agroindustry sector, followed by commercialization (26 percent), agro-processing (16 percent), and transportation (12 percent). With respect to value chains, wine, fruits, vegetables, and industrial crops contribute 32 percent of the total jobs in agriculture; extensive crops and oilseeds, which have experienced the fastest growth rates, represent 35 percent; meat and dairy contribute 23 percent and 9 percent respectively; and agricultural machinery contributes 1 percent. Little is known about the state of family farming, but evidence suggests that it plays an important role in agricultural employment: 53 percent of the sector's employment comes from family farming (see also box 4.1) (Guardia and Tornarolli 2010). Family farmers, if better integrated into value chains, could contribute to economic growth and rural job creation. They can play a significant role in tackling some challenges of the food system in Argentina—for example, obesity, which is endemic among the poor; insufficient provision of fresh fruits and vegetables in domestic markets; and huge food waste and losses. In addition, there is an untapped potential for locally grown food, an area where family farming systems can take center stage.

Forests and fisheries are potentially abundant sources of rents, but their contribution to the economy is limited. Argentina's forestry potential remains largely unexploited. Despite its 1.2 million hectares of plantations and 50 million hectares of primary forest, silviculture, timber extraction, and related services contribute only 0.2 percent of GDP (2 percent of the agriculture sector). Since at least 1990, Argentina has been a net importer of timber. Although the area under forest plantation has been increasing, the sector is much less developed than in Brazil or Chile. The next section discusses the threats to Argentina's forests. Fisheries are also a potentially valuable source of rents. With a surface area of 1 million

square kilometers, Argentina has one of the largest continental shelves and is rich in marine and coastal resources. Both fisheries and forests are affected by open access, the so-called tragedy of the commons, and high levels of illegality. Fish endowments, for example, have suffered from overexploitation because of the lack of a national management plan for sustainable and responsible fishing with a long-term vision. In 2017, fish represented 3.2 percent of total exports. Forests have also been under threat, as shown in the next section. “

Argentina's rich renewable energy potential could also become an increasingly important source of growth. Renewables in Argentina include hydro, wind, solar, and biofuels. Although hydroelectricity accounts for over one-third of the energy mix, Argentina only uses 20 percent of its hydro generation potential. Wind resources are world class, especially in the southern Patagonia region where capacity factors exceed 45 percent; and solar resources are abundant, with the finest resources in the northwestern region. In addition, the country is already one of the world's largest producers of biofuels.<sup>6</sup> However, as of 2012, less than 10 percent of total final energy consumed came from nonconventional renewable sources, lower than most countries in the region. Progress toward adopting clean sources of energy is yet to take place. Installed capacity is 60 percent thermal, 34 percent hydro, 5 percent nuclear, and 1 percent wind. Solar represents 8 megawatts (0.02 percent).

Argentina also counts on untapped nonrenewable energy reserves, but their development needs to be weighed against important risks. After a decade of declining production, the conventional energy sector received considerable interest after the discovery of the world's second-largest shale gas reservoir and fourth-largest shale oil reservoir in the Vaca Muerta basin. Authorities expect these to supply as much as 50 percent of Argentina's natural gas needs by 2021, and 60 percent of its oil requirements by 2020.<sup>7</sup> Such developments, however, carry important risks. Some of them are related

6 Data from the U.S. National Renewable Energy Laboratory (NREL), <http://www.nrel.gov/docs/fy13osti/56792.pdf>. This mostly represents bio-diesel.

7 Argentina spent about US\$15 billion in 2016 to import gas via its two Liquefied Natural Gas (LNG) import terminals and pipeline with Bolivia to meet the gap between its domestic gas demand and domestic production.





**TABLE 4.2. ARGENTINA'S WORLD SHARE AND WORLD RANKING IN PRODUCTION AND EXPORTS OF SELECTED AGRICULTURAL COMMODITIES, 2013–16**

	Production		Exports***	
	World Share %	World Ranking	World Share %	World Ranking
All crops	1.9	8		
All agricultural products (crops, processed crops, and primary livestock)			5.7	3
Apples*	1.1	15	1.9	12
Grapes*	2.3	12	0.6	18
Lemons and limes*	9.7	4	10.5	2
Maize*	3.8	4	16.2	3
Soybeans*	17.6	3	7.3	3
Sunflower seed*	6.3	3	1.6	10
Wheat*	2.5	12	1.5	13
Oil, soybean**	15.5	4	40.9	1
Oil, sunflower**	5.9	3	5.1	5
Wine**	5.1	6	3.1	9
Meat, cattle*	4.0	4	0.2	30
Meat, chicken*	1.8	11	2.9	9
Milk, whole fresh cow*	1.5	17	0.0	57

Source: Calculations based on data from FAOSTAT, <http://www.fao.org/faostat/en/#home>.

Notes: All shares and rankings based on physical units. \* = data for year 2016; \*\* = data for year 2014; \*\*\* = data for year 2013.

to the management of potential (and still somewhat unknown) environmental and social impacts, for which a solid framework is still needed (see box 4.2). In addition, as countries around the world transition to sustainable energy in order to keep global temperature rise to below 2 degrees Celsius, Argentina could miss out on the benefits of global technological shifts that allow countries a wider set of low-cost options to strengthen energy supply and extend access to energy.<sup>8</sup> Moving forward, it will be

important for Argentina to see oil and gas as part of a broader strategy for the energy sector to respond to increasingly pressing domestic and global challenges.

Finally, Argentina's unique natural landscapes and protected areas system can be a driver of tourism development. The country has a huge variety of climates and ecosystems ranging from the tropical and dry forests in the North to the tundra and polar ecosystems in the South. Some key

<sup>8</sup> Low carbon transition worldwide can affect fossil fuel-dependent economies through the emergence of a global price for carbon—and the related imposition of border carbon adjustments—and by the country's own locking into diversification patterns that are highly dependent on fossil fuels. In the case of Argentina, both the oil and gas sector and an evolving renewable energy sector could be impacted. World Bank (2018e) analyzes the optimal strategies for fossil fuel-dependent countries in light of the uncertain yet rapid evolution of climate negotiations. It argues for a careful assessment of the macro-fiscal and structural risks and opportunities of a low carbon transition, and for the development of economic strategies that are robust under climate negotiation uncertainty and that foster cooperation in international climate initiatives.



### Box 4.1. The potential of family farming for inclusive growth

This SCD argues that agriculture can be an engine of growth, but does this apply to small family farms and can the sector contribute to inclusion? Despite the economic importance of agriculture, rural households are twice as likely to have at least one unsatisfied basic need as urban ones. Scattered across Argentina's vast territory, these rural populations consist of small family producers, indigenous peoples, and rural workers. A substantial segment of them is made up of vulnerable people who share the rural space with larger landowners and producers of export commodities. Poverty is even more deeply entrenched among rural people living in dispersed settlements.

The agricultural sector seems to face challenges to become inclusive. Large-scale soybean production contributes little to job creation in comparison with other crops. Hence, support to family farming can be an important engine of inclusive growth, and support to the livelihood of small family producers is key in reducing rural poverty. Within the general policy framework for the agricultural sector, the government has recognized this and Argentina is a pioneer in terms of legislating for the family farming sector and creating institutions to increase the public sector response to the needs of this segment of the rural population. Access to information, empowerment, and capacity building are among the measures implemented to reduce inequities and asymmetries between small and large producers and between them and other actors in the agricultural value chains, which in turn would contribute to employment and incomes in rural areas. Key policy recommendations to ensure agriculture serves as an engine of inclusive growth include two broad types of policy packages, in addition to maintaining a sector neutral tax burden, including neutral trade policies. First, public investments to stimulate agricultural productivity, such as research and development subsidies, and public investments in education and infrastructure aimed at increasing the productivity of human capital in rural areas. Second, the implementation of social and economic reforms that will increase poverty-reducing effects of agricultural growth, for example, productive inclusion of rural households.

landmarks include the Andes, with the highest mountain in the world outside the Himalayas, the Aconcagua, the Iguazú Falls, the humid Pampas, and the Perito Moreno glacier. Argentina's tourism represents 7.1 percent of exports of goods and services (and the first in terms of services), and it generates 5.4 percent of employment (Ministerio de Turismo 2016). However, the country's tourist assets are likely underutilized. At its current stage of development, the tourism sector is expected to grow at 2.5 percent per annum, significantly lower than the forecasted global average growth of 3.9 percent (WTTC 2017). Key challenges include the scarce diversification in international markets with a high dependency on neighboring countries, and a bias toward low-end markets.

Summing up, Argentina's natural capital, an engine of growth in the past, still holds great potential as part of

broader efforts toward openness and competitiveness. In addition to agriculture, which was a key driver of growth at the turn of the twentieth century, Argentina has large unexploited potential in forestry—including native forests and commercial plantations—in fisheries, protected areas and unique landscapes potentially attracting a growing number of tourists internationally, renewable energy, and mining. But the country needs to break with the extractive policies of the past and consolidate a policy framework that attracts private sector investments. Policies, incentives, and enforcement are also required to ensure that the open access that characterizes many natural assets, such as forests, land, and fisheries, does not give way to illegality and degradation. Finally, a more sophisticated demand for greener attributes in global value chains is already emerging and Argentina has much to gain from developing information mechanisms

in support of labels and practices that encourage the thriving green businesses throughout the country. These recommendations are presented in more detail in the following section.

## Pathway 4: Investing in natural capital and ensuring environmental sustainability

### Unleashing the potential of natural capital

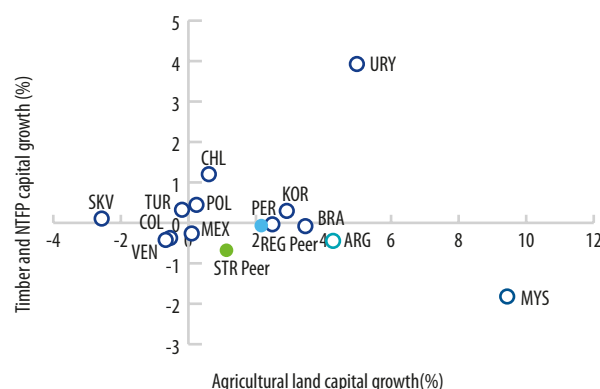
#### Challenges

The rate of forest depletion in Argentina is one of the world's fastest". Argentina's success in developing a competitive and productive agriculture sector has come at a high cost in terms of ecological externalities. The effective adoption of agricultural technologies resulted in increased profitability and rapid expansion of cropland into forest lands, often pushing pasture production into forest and other higher-value biomes. World Bank comprehensive wealth estimates based on Lange, Wodon, and Carey (2018) suggest that, between 1995 and 2014, the positive change in agricultural land value was paired with a negative change in forest land value (figure 4.3). In other words, the country has been replacing forest land with cropland. This contrasts with the results of Chile and Uruguay, which managed to increase the value of both types of capital over the same period. In physical terms, Argentina is losing its forest land at a faster pace than its peers: between 1990 and 2014 the country lost 21 percent of its forests (see map 4.1).<sup>9</sup> Loss of forest results in the loss of biodiversity and key ecosystem services such as carbon sequestration, water provision and regulation, and pollination, which are crucial in sustaining food production, protection against floods, and livelihoods. A

recent estimate of the cost of ecosystem services due to land use cover change between 2001 and 2009 indicates that the cost ascends to US\$80 billion, representing 15 percent of the country's GDP (Bouza et al. 2016).

Deforestation and poverty are related phenomena; even if a clear causality cannot be established, it is not possible to address one issue without taking the other into account. There is a positive correlation between the share of tree cover and unmet needs and between area of tree cover loss and unmet needs.<sup>10</sup> Moreover, a comparison of 2010 census-based unmet needs data and tree cover loss between 1992 and 2015 shows that deforestation took place mainly in areas with high poverty rates and that the provinces with the highest share of rural poverty also have the highest deforestation (map 4.1). Data also show that provinces with high poverty reduction between 2001 and 2010 had predominantly high deforestation rates, too (World Bank 2016a).<sup>11</sup> Agricultural expansion into marginal lands has also been accompanied by displacements of some of the most vulnerable people and forest-dependent communities (for example, indigenous and criollo in the northern provinces) who lack secure

**Figure 4.3: Average annual forest vs. cropland and pastureland capital growth, 1995-2014**



Source: Estimated based on Lange et al., (2018).

<sup>9</sup> In absolute terms as Argentina's deforestation has been second only to Brazil's in the Latin American and Caribbean region.

<sup>10</sup> Correlation coefficient between tree cover and unmet needs: 0.544 ( $p=0.000$ ); Correlation coefficient between tree cover and unmet needs: 0.351 ( $p=0.000$ ).

<sup>11</sup> Note that there are also areas with high poverty prevalence and minimal deforestation, such as in the western part of northwest Argentina, which confirms the complexity of the forest and poverty relationship.



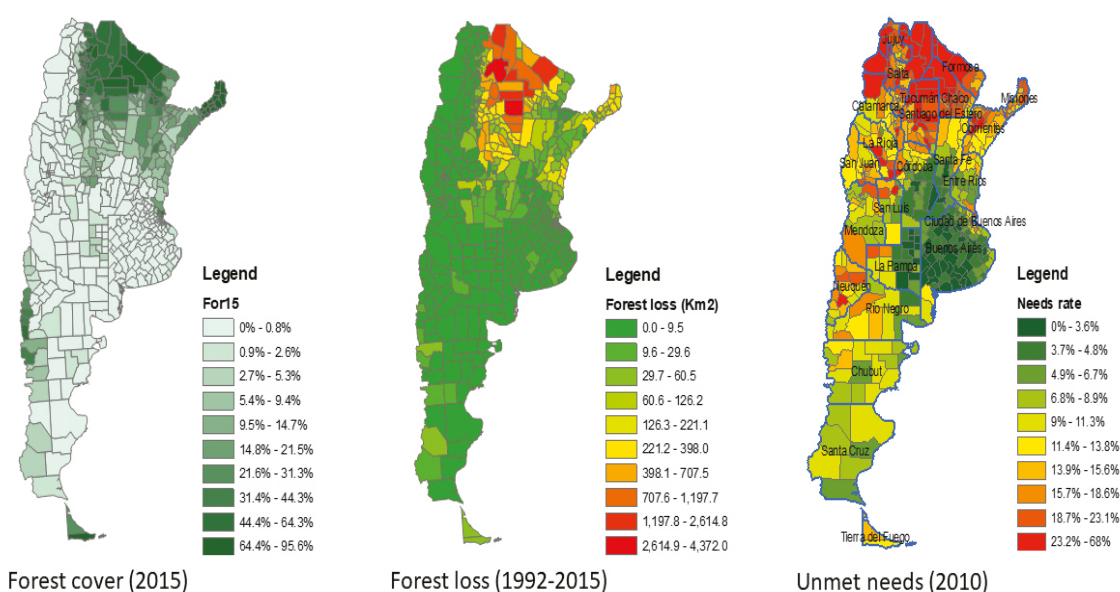
land tenure. The fact that poverty reduction may be associated with forest loss in the short term is troubling because forest services may be important to sustain livelihoods over the longer term. But a true counterfactual does not exist. In fact, it is possible that controlling forest loss through sustainable forest management and providing better access to markets to forest dependent communities can contribute to poverty reduction. The government's efforts to provide access to the Forest Fund to poor communities, even without perfect land tenure, is a step in the direction of better inclusion.

Inadequate land use practices, including deforestation, may increase the risk of flood occurrence, which most affects the poor. The world's second-largest reinsurer, Swiss-Re, ranks Argentina among the 10 emerging economies with the highest flood hazard exposure. This exposure translates into significant losses: over the past two decades, estimated losses due to floods exceeded US\$3 billion per year, equivalent to 0.7 percent of GDP in 2012. Some of the most severe impacts are felt in the agriculture and livestock sector, particularly in the Central and the Northern provinces: in 2017 about 20

percent of agricultural land and 80 percent of land dedicated to cattle ranching were affected by floods in the provinces of Buenos Aires, Córdoba, Santa Fe, La Pampa, and Entre Ríos (Ministerio de Agroindustria 2017b). In the province of Buenos Aires, between 2000 and 2011 floods caused nearly US\$4.5 billion in losses and affected 5.5 million people, with a particularly negative impact on poverty alleviation, economic development, and transit connectivity (World Bank 2016c). The impact on poverty is large because poor people are exposed to hazards more often: they tend to live in high-risk areas, live in low-quality houses that suffer more damage when floods occur, and lose more as a share of their assets when hit (Winsemius et al. 2018). In fact, this type of disaster can push people into poverty.

The literature points to the effect of soybean monocrop on flooding (see, for example, Nosetto et al. 2012). Moreover, deforestation and the replacement of perennial pastures for annual crops, combined with poor watershed and wetland management, reduce groundwater infiltration—though it may at the same time reduce evapotranspiration—and increase erosion and runoff. These results increase

**Map 4.1:** Forest cover, forest loss (1992–2015), and poverty by province (2010)



Sources: Data from the World Bank's Hidden Dimensions of Poverty Dataset; INDEC 2010.



the risk of flooding in the presence of extreme weather events that are expected to become more frequent with climate change (see climate change subsection) (World Bank 2016a). When deforestation occurs in the upper watersheds of the main river basins, the water regulation capacity of ecosystems is affected and water runoff accumulates further downstream in higher volumes and at a faster pace, often creating floods. Data for Argentina are scant, and no correlation can be established between deforestation and flood risk. However, a visual comparison between the spatial distribution of deforestation and flooding events suggests that higher riverine floods occur in regions where deforestation is higher (World Bank 2016a). More detailed studies are needed to better assess the impacts of deforestation on flooding in Argentina and identify areas that might become vulnerable to flooding in the future as a result of land use changes.<sup>12</sup>

Although the country has set a promising land use planning instrument, its implementation faces challenges. In 2007, the Minimum Standard Natural Forest Protection Law (*Ley de Presupuestos Mínimos de Protección Ambiental de los Bosques Nativos*, 2007) was setup to combat deforestation. This law constitutes a federal compensation scheme by which provinces receive payment for protecting forests through territorial planning and enforcement. It established an innovative framework to control deforestation, promote land use zoning, implement sustainable forest management, and strengthen collaboration between the national and provincial forest administrations. A Forest Fund was established to transfer public resources to provinces to promote sustainable use of forests and provide payment for environmental services. To date, all provinces have implemented land use zoning; however, although deforestation rates have decreased in recent years, forest loss remains high and about half is illegal. In addition, deforestation persists in areas zoned for conservation, often because clearing permits are granted in nontransparent ways. Law enforcement, largely the responsibility of provinces, has weaknesses: stronger

control capacity and penalties for illegal deforestation, and transparency in the way that permits are granted need to be established. Enforcing the Forest Law also requires sufficient resources: resources allocated for implementation and monitoring have been less those stipulated in the law. In addition, a more efficient management of the Forest Fund, with broader access to different type of stakeholders, including small holders, and close coordination between national-, provincial-, and local-level stakeholders is required.

Agriculture is also depleting its very resource base: soils. Degradation of the Earth's land surface through human activities is a systematic phenomenon that affects the well-being of millions of people all over the world. In the long run, it exacerbates food and water insecurity and the effects of climate change (IPBES 2018). In Argentina 75 percent of soils are characterized as arid and semi-arid, with high risk exposure to desertification processes (Belausteguigoita Rius 2016). Soils are already highly compromised: it is estimated that 37.5 percent are affected by hydraulic and wind erosion (Casas and Albarracin, 2015). This represents a direct threat to maintaining high yields in the future and is already imposing significant costs to the economy. For example, the work of Bouza et al. (2016) on the economics of land degradation estimates that the cost of land degradation on grazing land on milk and meat production was about 11 percent of the livestock GDP in 2007.

Naturally rich fish resources have declined through overfishing. Fish stocks have suffered from overexploitation due to the lack of a national management plan for sustainable and responsible fishing with a long-term vision. A proxy for weak marine resources management is the amount of marine protected areas (as a percentage of territorial waters; figure 4.4). Argentina, with just under 9 percent, has a "shortage" compared to other countries in the region, such as Brazil (20 percent), Mexico (19 percent), Colombia (17 percent), and República Bolivariana de Venezuela (17 percent). The

12 In a study for Malaysia, Tan-Soo et al. (2016) stress the importance of using disaggregated land use data, controlling for potentially confounding factors, and applying appropriate estimators in econometric studies on forest ecosystem services. Their results do show that the conversion of inland tropical forests to oil palm and rubber plantations significantly increased the number of days flooded during the wettest months of the year.



maximum allowable fish catch systematically exceeded levels of acceptable biological catch. Argentina lacks monitoring and control systems, and there is an absence of selective fishing devices to avoid capture of juvenal fish (Fundación Vida Silvestre 2011). Stocks of Patagonian hake (*Merluza común*), the main species exploited, were in crisis between 1986 and 2011 when the country lost about 60 to 80 percent of this resource (ibid.). As a result, captured volumes have decreased in recent years, in part because of fishing restrictions that were set to address overexploitation and illegal fishing. Argentinian shortfin squid (*calamari illex*) and shrimp have now become important products that contribute large volumes to fish landings; given the crisis in Patagonian hake stocks, some fishing firms have replaced this species with calamari and shrimp. In 2017, shrimp capture increased by 30 percent in relation to 2016 (Ministerio de Agroindustria 2017a).

Reversing natural resource depletion trends will require a combination of enforcement, incentives and institutional coordination between the national government and the provinces. As noted earlier, renewable natural capital, including soils, forests, protected areas and fisheries can be an important engine of growth. But degradation is taking place at a fast rate. To reverse this situation, enforcement is key, particularly by the provinces,

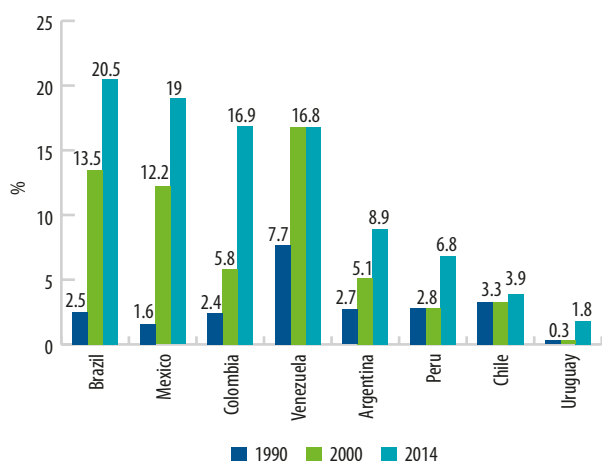
which hold control over natural resources management decisions. To foster collaboration between the national government and the provinces, it will be key to further develop information systems that are able to track performance on land use change, forest degradation and fishery management. Such information systems can be used in turn to feed performance-based systems for the channeling of resources, such as the ones in the national Forest Fund. A stronger information base on natural resource management will also be key to improve private sector decision making.

### The role of policies, investments, and markets

Harnessing natural capital for growth requires appropriate policies and incentives. The fiscal regime has been important in determining the fate of the nature-based sector. For example, Argentina's agriculture sector has suffered from extractive rent policies (especially exchange restrictions, and taxes and quotas on agricultural exports) that reduced profitability and undermined incentives to invest in the sector. The results of these adverse policies were pronounced: despite a boom in global commodity prices, investment in the sector fell dramatically and productivity growth slowed. From 2002 to 2013, the average productivity growth in Brazil, Paraguay, and Uruguay was 30 percent higher than in Argentina; and in 2013 the Food and Agriculture Organization's Agriculture Production Index was between 20 percent and 30 percent higher in these countries than in Argentina. Extractive rent policies affected particularly beef and wheat production, which led to increases in prices of beef and wheat-based products. New economic policies that address these issues also be climate-smart and help reduce vulnerability to weather-related risks. Climate change will likely pose important challenges to agriculture, particularly in the central part of the country, because it will increase water variability in terms of flood intensity and water availability for agricultural production.

Policies and institutions can be used also to encourage the sustainable management of natural capital by reducing

**Figure 4.4:** Marine protected areas as percent of territorial waters, 1990, 2000, and 2014

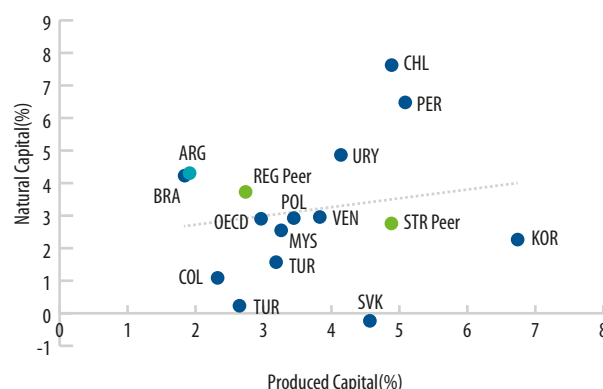


Source: Data from the World Bank's World Development Indicators.

the scope for free-riding. The trade in forestry products is a case in point. Although well-regulated cross-provincial trade in timber would benefit the country as a whole, each province may realize a gain by encouraging its own exports of timber. Provincial forest administration and control systems have evolved autonomously, resulting in great differences between forest management and timber transport regulations. These disparities create the condition for the illegal harvest of timber and lost opportunities for the formal economy. If appropriately implemented, the 2007 Forest Law (discussed earlier in the chapter) can unlock opportunities in Argentina's forestry sector. A key line of action is the effective targeting of economic incentives, such as the Forest Fund.. Translating the Forest Law into action requires broadening access to Forest Fund resources as well as close coordination between national, provincial and local level stakeholders to improve Fund performance.<sup>13</sup>

Policies to deal with open access are crucial in the fisheries sector as well. A more sustainable fishing model must be adopted. It is recommended that Argentina manages fisheries under an ecosystem-based framework, as an integrated management strategy that takes into account all components of the ecosystems and aims to align social and economic needs with the preservation of ecosystems. The first step in this direction would be to develop a national policy of sustainable fisheries management. In addition, the development and implementation of a legal framework for the sector is essential. It is also key that estimates of biologically acceptable captures from the National Institute for Fisheries Research and Development are adopted by the National Fisheries Council, when setting maximum catch allowances. Key also is investment in fisheries research to be provide accurate information for the design and management of fish resources. Finally, the promotion of certifications can generate incentives to adopt sustainable fishing practices (Fundación Vida Silvestre, n.d.).

**Figure 4.5:** Average annual change in produced capital and natural capital, 1995-2014



Source: Data from Lange et al (2018).

In addition to good policies, harnessing natural capital for growth requires investment. Traditional investments in produced and human capital and the management of natural capital can go hand in hand. Figure 4.5 shows that countries that invest more in infrastructure tend (with some exceptions) also to invest more in the value of natural capital. The same relationship holds between human capital and natural capital. This is a key element of the growth narrative in resource-rich countries: to put natural capital to work, it is necessary to invest in access to markets, irrigation, technology, and transport, among others. An example of this is agriculture. In addition to its favorable climatic conditions, Argentina has become a leader in technological development and adoption for the agricultural sector. This has resulted in both the intensification of production and expansion of the agricultural frontier, mainly driven by the expansion of genetically modified soybean crops in no-tillage systems.<sup>14</sup> Yet Argentina has probably lagged behind its true potential because of its low level of investment. For example, the sector faces high transport and logistics costs (which account for approximately 35 percent of the free on board price of a ton of soy).

<sup>13</sup> The recent government of Argentina decision to remove restrictions requiring formal tenure to access Forest Fund resources has generated an opportunity to increase the share of fund resources flowing to poor communities (particularly indigenous and *campesino*) that were previously excluded because of their unclear tenure status.

<sup>14</sup> Today Argentina produces 17 percent of world's soybean and is the third major producer after the United States and Brazil.





Investments, public and private, can be crucial in boosting productivity in sectors that rely on natural capital goods and services. For example, Argentina could harness its soil and water abundance into a more sophisticated and sustainable agricultural sector. New Zealand is one of the countries that followed a growth strategy led by agricultural exports. New Zealand's agriculture today is the most deregulated in the world, and government support is provided mainly through expenditures on general services such as agricultural research and biosecurity controls for pests and diseases (OECD 2011). Many initiatives in support of private sector investments in the New Zealand's agriculture sector have taken place over the years. The Primary Growth Partnership was launched in 2009 as a government–industry initiative to invest in significant programs of research and innovation. The Community Irrigation Fund was established in 2007 to assist rural communities in difficulty to address water supply risks as part of New Zealand's sustainability and climate change initiatives.

Another example of the role of investments, particularly private, relates to Argentina's renewable energy potential. The high dependency of the wholesale power market and electricity concessions on government transfers has increased the risk perception of investing in the sector. To address these barriers, the country has issued (in 2015) and is implementing the Renewable Energy Law 27,191. This law sets ambitious mandatory renewable energy targets of 20 percent of overall electricity consumption by the end of 2025 and has mandated the creation of a Fund aimed at injecting funding and offering guarantees for renewable energy projects. The Ministry of Energy and Mining established the RenovAr program, releasing renewable energy power purchase agreement (PPA) tenders, and developed Trust Funds for the Development of Renewable Energy (FODER) designed to cover ongoing PPA payments (that is, liquidity support) and payment obligations emerging from a "put option (IFC 2017)." Moreover, since 2017 large energy consumers are allowed to sign PPAs directly with renewable energy producers. The Executive Resolution, *Resolución 281-E/2017* on the *Régimen del Mercado a Término de Energía Eléctrica de Fuentes Renovables*, has built on the framework laid out

by the Renewable Energy Law. In addition, the recently approved Law 27,424 for distributed generation allows consumers to produce their own electricity and inject it back into the grid. The main challenge ahead is to maintain the momentum in the industry and make sure that the many ongoing tendering processes and projects in the first stages of implementation get to financial closure and are commissioned by the expected deadlines.

Moreover, investments in restoration will be key to generating production, reversing trends in land degradation, and diminishing the need for infrastructure. Short-term gains from unsustainable land management practices often result in long-term losses, making the initial avoidance of land degradation an optimal and cost-effective strategy (IPBES 2018). Estimates show that the returns to taking action to stop land degradation and restore degraded land in Argentina are at least four times higher than the cost of action (Bouza et al. 2016). Restoration efforts may help meet increasing demand for livestock and agricultural products and would simultaneously provide options to diversify farmer income, sequester carbon for improved soil health, and reduce soil erosion and desertification processes. The recently launched National Program to Restore Degraded Native Forests constitutes a move in the right direction to address degradation, and its implementation will be key. Implementation will require technical knowledge, extension services, incentives, and support for land-owners to help overcome upfront costs. In addition, critical information and adequate baseline data on the state of soils are needed to further understand the magnitude of the issue, and to implement effective monitoring strategies and verification systems along value chains. These would allow consumers throughout supply chains to make better-informed commodity choices that reward responsible management practices.

Finally, growth based on the principle of sustainable management of resources can be a great source of opportunity in global value chains. An analysis of global value chains in Uruguay, which might also provide interesting insights for Argentina given the similar resource and comparative advantage patterns of the two neighbors,



finds important growth prospects and attractive price margins in the niches of sustainable beef, nongenetically modified (non-GMO) soy, and organic milk powder (World Bank 2018e).<sup>15</sup> Argentina could also gain by strengthening its international offer of adventure tourism and ecotourism, and explore the potential for exporting knowledge-based, biotech, and e-commerce services (all areas with a low environmental footprint and in which Argentina has a competitive edge). Argentina's private sector has already used sustainable practices as a key driver of trade competitiveness in sectors such as horticulture and wine making, among others. The public sector however has not kept pace, and initiatives by the Ministry of Agroindustry and the Secretary of Commerce have been narrowly focused. Going forward, it is important to develop environmental information data that would back up the green attributes of export products (for example organic, ecological, bio, and fair trade). Developing niche markets on differentiated products may present new opportunities for regional economies and family farming.

## Pursuing climate-smart growth

Across most of Argentina, average temperatures have shown an upward trend since the beginning of the 20th century, with an increase in the number of extremes and occurrences of heat waves during the most recent decades. There has been a remarkable increase in precipitation over most of subtropical Argentina, especially since 1960. Although the climatic changes have favored agriculture yields in the last decades and the extension of crop lands into semiarid regions, it also induced desertification processes in productive areas and produced frequent heavy rainfalls and consequent flooding of rural and urban areas. In addition, glaciers in the Andean region have continued to recede, reducing

river flows. Climate impacts for the first half of the 21st century might be addressed by timely adaptation policies in key sectors including agriculture, water, energy, and health. However, by the end of this century, under extreme greenhouse gas (GHG) emissions and business-as-usual scenarios, the projected warming could reach an average change of about 3.5 degrees Celsius in the north of the country, relative to present-day conditions. Recurrent droughts and floods in the most productive areas of the country will produce important social, economic, and environmental impacts. Dealing with these impacts will require strong policy shifts to satisfy household, industrial, and environmental water competing needs to ensure and sustain resilient growth.

Argentina lags in terms of adaptation readiness. Although Argentina is less vulnerable to climate change than most countries (it is ranked 40th out of 181 countries in terms of vulnerability)<sup>16</sup> and ranks similarly to its peers, its lack of a safe and efficient business environment makes it less ready than most of its peers to effectively use investments for adaptation. (figure 4.6).<sup>17</sup> In addition, Argentina's performance on reducing vulnerability and increasing readiness to deal with climate hazards has been worse than that of its peers: figure 4.7 shows, on the vertical axis, that the vulnerability component related to the ability of society to reduce potential damage and to respond to negative consequences of climate events has improved (that is, decreased) in recent years, but it has done so less rapidly than most of its regional peers. When it comes to improve readiness, the country has not been able to improve its capacity to make effective use of adaptation at the pace its regional peers have (figure 4.7).<sup>18</sup>

Argentina has defined a target for GHG emissions reduction and a set of adaptation needs that would

15 While here the focus is on agriculture, Argentina is also rich in tourist assets that are likely underutilized. At its current stage of development, the tourism sector is expected to grow at 2.5 percent per annum, which is significantly lower than the forecasted global average growth of 3.9 percent (WTTC 2017).

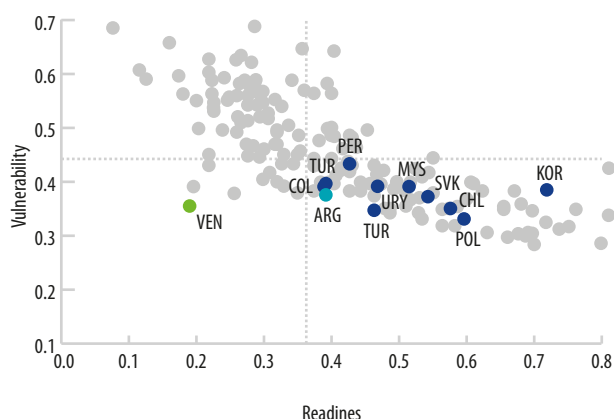
16 The University of Notre Dame's Global Adaptation Initiative (ND-GAIN) Country Index measures vulnerability as the propensity to be negatively impacted by climate hazards and it depends on: exposure to hazards; sensitivity to hazards, and adaptive capacity. For more information, see <https://gain.nd.edu/>.

17 The readiness indicator includes the investment climate, political stability, control of corruption, rule of law, regulatory quality, social inequality, information and communications technology infrastructure, education, and innovation.

18 The adaptive capacity indicator includes: medical staff per 1000 people; access to improved sanitation facilities; protected biomes; engagement in international environmental conventions; quality of trade and transport infrastructure; percentage of paved roads; electricity access; and disaster preparedness.

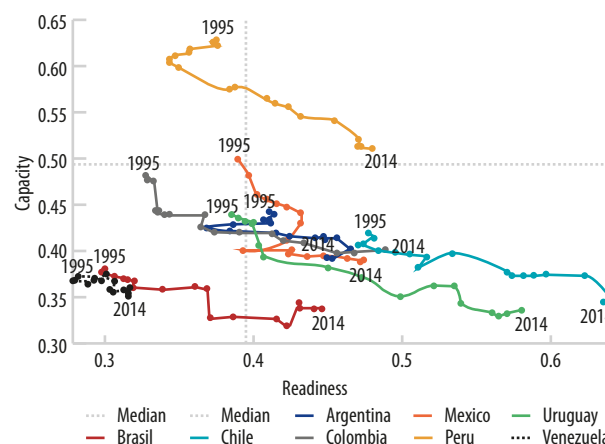


**Figure 4.6:** Matrix of vulnerability to climate change risks and readiness to act, 2016



Source: Reprinted from University of Notre Dame Global Adaptation Initiative (ND-GAIN), <https://gain.nd.edu/>.

**Figure 4.7:** Matrix of capacity to act against climate risks and the economic readiness to accept investments for implementation. Evolution between 1995-2014



Source: Reprinted from University of Notre Dame Global Adaptation Initiative (ND-GAIN), <https://gain.nd.edu/>.

allow it to contribute to combatting climate change and its impacts. Through its Nationally Defined Contributions under the Paris Agreement, Argentina has committed not to exceed a net emissions level of 483 million tons of carbon dioxide equivalent by 2030. This is an ambitious target and ought to be delivered with a series of economic targets focused on both adaptation and mitigation actions. These actions include road maps for the enhancement of renewable energy, climate-smart agriculture, sustainable forest management, low-carbon transport, and waste management. Moreover, Argentina has reaffirmed the commitment to the 2030 Agenda for Sustainable Development, which includes climate change. The targets can be achieved through substantial efforts from all sectors of society, but adequate integration of climate-smart policies and means of implementation will need to be designed and followed through. Currently, Argentina has not costed out the actions needed to meet either GHG emissions reduction commitments or the large set of adaptation measures that need to be implemented. Climate finance remains a key challenge for the country.

The ability of the country to sustain low-carbon and resilient growth will require the removal of several binding constraints and alignment of national climate strategies and international commitments. First, it is important to encourage smart planning through access to climate research and information, awareness, and early warning systems. Timely and accessible information on climate risks and impacts can transform the way vulnerable sectors plan climate-smart development. For example, access to short- and medium-term forecasts can allow small and medium-size farms to take full advantage of years with favorable conditions for rain-fed crop production and reduce risks in less favorable ones. Second, as Argentina fills its infrastructure quality gap, it will need to comply with low-carbon and resilience standards. If the right investment choices are not made today, the country will be locking into high-carbon infrastructure for the next 40 to 70 years. The public sector will have to take a leading role, but private sector solution providers will also have to step up to the plate.<sup>19</sup> Third, managing risks through contingency planning and financial and risk-sharing instruments will be needed to improve the ability of vulnerable populations to hedge

<sup>19</sup> It is important to note that the country is still missing an effective energy efficiency policy, one that should complement the renewable energy policy currently under implementation.



impacts from recurrent risks and economic impacts. For example, agricultural insurance is limited or not available to medium and small farmers—although efforts to expand coverage are ongoing. Finally, there is important scope for integrating adaptation and mitigation agendas. The integration and coordination of existing climate change policies for both adaptation and mitigation in key sectors (energy, transport, industry, waste, and agriculture, forestry, and other land use) is a unique opportunity to accelerate both resilient and low-carbon growth development in the country.

## Managing pollution and the diseconomies of growth

Environmental degradation from pollution and waste has direct impacts on the economy because of health costs and loss of productivity. Most Argentines live in urban areas where urbanization processes have created environmental externalities such as air and water pollution, and led to unsanitary waste disposal practices. Without adequate management, pollution can offset the economic gains from agglomeration. Air pollution and poor wastewater and waste management are important threats to human health. According to the Lancet Commission on Pollution and Health, 8.4 percent of all deaths in Argentina in 2015 were caused by pollution in air, water, or soil. Although this is below the average for lower- and upper-middle-income countries (10.3 percent), it is higher than the average for high-income countries (7.3 percent) (GAHP 2017). The cost of air pollution on society was estimated at about 1.8 percent of GDP, and annual costs from health effects related to inadequate household water, sanitation, and hygiene were 0.4 percent of GDP in 2012 (World Bank 2016a). In rural areas the exploitation of mineral resources imposes important trade-offs: although it can contribute to GDP growth and generate important revenues, it carries risk and imposes negative environmental and social impacts.

Poor air quality in urban areas impacts on the population, especially the most vulnerable groups. In 2015, 97.3 percent of Argentines were exposed to levels of PM<sub>2.5</sub> (fine particulate matter with a diameter less than 2.5 micrometers) that exceeded World Health Organization (WHO) guideline values. This rate for Argentina was similar to exposure rates in structural peers (98.1 percent) but higher than the in region (79.8 percent) and in Organisation for Economic Co-operation and Development countries (65.8 percent) (World Bank 2018a). In addition, modeling estimates from the Country Environmental Analysis (World Bank 2016a) indicate that (i) air pollution in the main urban agglomerations is far above the WHO recommended thresholds, (ii) Buenos Aires exceeds the levels of pollution of other cities by significant amounts, and (iii) despite slight decreases in air pollution in large cities and acceptable levels in small cities, increasing urban population and traffic are expected to contribute to higher levels of pollution in the future.<sup>20</sup> Today, ischemic heart disease, lower respiratory infections, and chronic obstructive pulmonary disease are among the four main causes of death in Argentina,<sup>21</sup> and are all linked to poor air quality (World Bank 2016a). The share of deaths caused by lower respiratory tract infection has increased by 25 percent between 2005 and 2016,<sup>22</sup> by 11.6 percent in the case of chronic obstructive pulmonary disease and by 7 percent in the case of ischemic heart disease. Distributional impacts of air pollution are biased toward the poor, who tend to be more exposed to air pollution and less aware of the possible negative consequences. Poor health due to air pollution impacts people's productivity and their ability to work (Graff Zivin and Neidell 2018). For children, reduced productivity translates into educational underperformance, with long-term negative effects for economic performance (*ibid.*) and poverty alleviation. Although information on air quality in Argentina remains limited, the available evidence points to increased use of vehicles and traffic congestions as the main sources of urban air pollution.

20 According to the model used in this assessment, PM<sub>2.5</sub> pollution is above the WHO recommended threshold of 10 microgram per cubic meter in Buenos Aires (six-fold), Córdoba (three-fold), and Mendoza (two-fold). Pollution is at the WHO threshold in Rosario and below the threshold in Salta and San Salvador de Jujuy.

21 Data from the Institute for Health Metrics and Evaluation, available at <http://www.healthdata.org/argentina>.

22 Data from the Institute for Health Metrics and Evaluation, available at <http://www.healthdata.org/argentina>.



Water pollution from domestic activities, industry, and agriculture is increasing in many watersheds and degrading surface water, which is the main source for water consumption. Surface water is vulnerable to pollution from discharges of untreated wastewater or domestic activities, industrial effluents, or agricultural runoff. There are 16.7 million people, or 42 percent of the urban population, who do not have access to wastewater systems: only 65 percent of municipal waste water is collected and only 12 percent is treated before disposal. Treatment levels for fecal effluents are less than 20 percent nationally, posing a clear health risk to people living near contaminated waters. Given that many regions of the country report high levels of arsenic in groundwater, increasing pollution of surface water is of particular concern. Although central and provincial governments are making significant investments in wastewater infrastructure, the water safety and sanitation sector faces substantial sustainability challenges that can put these investments at risk.

Pollution from increased use of agrochemicals is also a source of concern. The shift toward industrial agriculture came with an increase in the use of fertilizers and herbicides, especially glyphosate; and the use of agrochemicals rose by 1000 percent in the last 20 years.<sup>23</sup> The use of glyphosate and other herbicides has carried important economic benefits, especially through the promotion of zero-tillage agriculture, allowing the sector to exploit Argentina's comparative advantage for soybean production and establish its role in the modern global economy (Bouza et al. 2016). However, glyphosate is classified as probably carcinogenic to humans, and high concentrations of this agrochemical have been found in the Parana basin (Etchegoyen et al. 2017; Ronco et al. 2016). Case studies increasingly warn about severe harmful effects of glyphosate on human health and the environment. Further investigation is required to assess the trade-offs associated with GMO crops that rely heavily on agrochemicals.

Key strategies to address pollution are improving

information systems (including information on air quality), strengthening monitoring capacities, enabling stronger management, and implementing target policies to the most polluted sectors. In the case of water, current management of water resources is not grounded on good-quality information about resource availability and use. This hinders the development of policies and planning instruments to manage water resources, address conflicts among users, protect the environment from pollution, and reduce vulnerability to extreme weather events. In addition, lack of data hinders the capacity of regulators to monitor utilities' performance and charge adequate tariffs for water use and water discharges. Stronger management, by means of building capacity in institutions and improving regulations is also key. To address local air pollution, Argentine cities can learn from other Latin American cities that in the past two decades have begun to deal more seriously with this issue. These cities have strengthened their environmental institutions, upgraded their environmental measurement and monitoring systems, and imposed environmental standards for vehicles, fuel quality, and industries. The recent launch of the Red Federal de Monitoreo Ambiental (Red FEMA)—a data management system that aims to produce periodic and systematic information to facilitate monitoring of air, water, and soil quality at the province level—is a move in the right direction but one that needs continuity to ensure all the provinces join the system and use the information for decision making.

Inefficiencies in solid waste management directly affect citizens' quality of life and livability in cities. An unclean and disordered environment affects health, livability, property values, attractiveness for business and tourism, and sense of security. The inclusion chapter described how many Argentines still lack access to regular collection services and how open dumps remain the most common mode of disposal. In addition, landfill organic waste (about 50 percent of total waste produced) is an important source of vector-borne disease and a significant cause of GHG emission (World Bank 2016a). In addition, reuse and recycle rates are low: only 11 percent of total waste

23 Data from the FAOSTAT database of the Food and Agriculture Organization of the United Nations, <http://www.fao.org/faostat/en/#data>.



### Box 4.2. Oil, gas, and environmental compliance

The current administration is focusing on rebuilding Argentina's energy industry and seeks to capitalize on the nation's enormous unconventional oil and gas potential. So far, the government has made progress in amending the complex system of domestic oil tariffs and subsidies introduced by the previous administration. Local price distortions led to considerable underinvestment in the energy industry, which turned the country into a net energy importer despite its tremendous unconventional oil and gas resources. The rewards of rebuilding this industry are large, considering that Argentina's technically recoverable shale oil reserves come to 27 billion barrels—60 percent of the country's technically recoverable crude. The Vaca Muerta formation is ranked by the U.S. Energy Information Administration as the world's second-largest unconventional oil and gas reserves. Argentina's national (and largest) energy company, YPF, has committed to investing US\$30 billion over the next five years to exploit the potential of Vaca Muerta. The company will attempt to match the U.S. shale oil and gas boom. Because YPF lacks its own expertise, capital, and workforce, foreign investments are particularly important if Argentina is to realize its full energy potential.

These massive investments, if realized, must avoid undue harm to livelihoods and the environment. This area is still full of unknowns. For example, there are concerns that fracking may contaminate drinking water supplies with harmful chemicals, raising public health issues. Fracking may change local geology in a substantial way, leading to earthquakes. Moreover, fracking can be characterized by methane (a potent GHG) leakage, reversing one of the potential advantages of gas over “dirtier” fuels such as coal. More effective governance of social and environmental issues in unconventional oil and gas developments is needed. Some of the main challenges associated with new developments include water use and management, surface planning to minimize disruption of other local productive activities, public disclosure of chemicals, air emissions, and GHG from flaring and venting. Government must improve coordination of the issuance of regulations and actions taken by energy and environmental authorities, particularly between federal and provincial levels. Such improvements could result in, for example, (i) minimizing potentially negative environmental and social impacts of oil and gas operations on regional economies, (ii) harmonizing environmental regulations, (iii) planning infrastructure expansion, and (iv) increasing local content of supply and services. New unconventional hydrocarbon developments must engage properly with potentially affected communities.

is recycled (compared with 46 percent in Organisation for Economic Co-operation and Development countries), and most of that material is estimated to be recovered mostly by informal waste pickers (cartoneros) (Bioenergy Consult). In Ciudad Autónoma de Buenos Aires, despite a “zero waste” plan set by the *Ley 1854 Gestión Integral de Residuos Sólidos*, the ambitious target to reduce the amount of recyclable materials being sent to landfills by 2020 is still far from being met. However, there are important opportunities to reduce impacts of inefficient waste management and reduce GHG emissions: in many parts of the country, facilities that collect and combust methane from landfills, and recycling and composting

programs, already exist; but increasing their capacity and increasing separation of waste at the source remain main challenges.

Accelerating a transition toward a circular economy would enable a more efficient use of resources and improve livability, but this transition needs coordinated actions. Solid waste management has followed an inefficient linear model with low reuse and recycling rates that if improved could result in significant savings, social opportunities, and environmental benefits. MAYDS is currently promoting a circular approach for integrated waste management, with the National Plan for Circular



Economy (*Plan Estratégico Provincial PEP para la gestión integral de residuos sólidos urbanos hacia una economía circular*). This plan set the guidelines for “Provincial Strategic Plans of Waste Management toward a Circular Economy,” instruments the provinces must develop, with the participation of municipalities, to identify guidelines, actions, and policies for improving waste management at the province level. The development of these plans is a step in the right direction toward pursuing a circular model that maintains the value of products and materials for as long as possible and minimizes waste and resource use. The circular model is also expected to reduce the long-term costs related to dependence on landfills, provide substantial net materials savings, provide opportunities for innovation, and contribute to job creation.

A key element to achieving environmental sustainability is to identify and assess the risks and impacts associated with investments and policies. This is the role of Environmental Impact Assessment (EIA), when it comes to projects, and Strategic Environmental Assessment (SEA), when it comes to policies and programs. Although the federal environmental framework requires that the relevant authorities (provinces and sectors) conduct EIAs for projects with significant impacts, there are no regulations at the federal level that establish minimum requirements for the use of this instrument across all provinces and sectors. Compared to international best practice, shortcomings include (i) lack of standardized criteria to evaluate risks and impacts; (ii) lack of adequate screening to identify the projects that should be subject to EIA; (iii) limited public participation; and (iv) weak monitoring to ensure that the mitigation measures proposed by the EIA are implemented (World Bank 2016a). As a result, EIAs have largely been used as procedural permitting tools to allow major projects to move forward, rather than as tools to guide project design through impact assessment and stakeholder buy-in. This situation needs to be fixed: it poses a risk not only to the environment but also to growth, as noncompliant projects can be attacked and eventually stopped by public outcry. Oil and gas developments, if not well managed

from an environmental standpoint, can pose risks to the investments in the sector (box 4.2). Minimum standards need to be established, and capacities to enforce regulation at the provincial level need to be strengthened.







# CHAPTER 5







## PRIORITIES FOR A SUSTAINED AND INCLUSIVE GROWTH

The main objective of this study is to identify what are for Argentina the most critical factors constraining or driving growth, inclusiveness, and sustainability. The constraints emerge from the analysis presented in the previous sections, based on recent evidence and studies carried out by the World Bank and other national and international institutions as well as the academic literature. In this chapter, the constraints are listed, and further distilled, with the help of a prioritization exercise. This section also highlights areas where there are data and knowledge gaps (see appendix C).

### Prioritizing reforms for shared prosperity

A prioritization and sequencing of reforms is critical given the broad reform agenda Argentina faces. The country has embarked on the transition to becoming a more globally integrated, competitive economy. Such a shift implies a large reallocation of factors of production away from non-tradable, low-productivity sectors into more dynamic tradable sectors, which necessarily entails winners and losers in the short to medium term. The transition occurs when the government is also tackling persistent macroeconomic imbalances and significant currency turmoil that make the country vulnerable to external shocks and domestic tensions. In this context, a careful design in terms of setting priorities and sequencing is key, as is putting in place social policies and sectoral plans to mitigate the adverse impacts of the economic reform program. Current government policies are consistent with this approach, which not only protects the vulnerable, but increases the probability of a lasting social consensus developing in support of the reform program.

Argentina can learn from the lessons of its previous reform episodes. Many past reform efforts underestimated the importance of a proper sequencing, necessary complementary policies, or the social costs of the transition. Without broad-based support and appropriate safeguards for the vulnerable, for example, the reform process might stall, and could even be reverted. The proposed reforms can, however, face a different fate than previous efforts in that they seek to put a comprehensive package of policies in place to tackle, at the same time, growth challenges, inclusion concerns, and the potentially large scope for productivity improvements and natural capital-based growth.

Moving along the reform path will not be easy. The forces that caused political and economic volatility in the past still linger and are likely to influence the future. Just as this report was about to be completed, high devaluation pressures forced Argentina's government to increase its focus on short-term macroeconomic stabilization priorities. Important reforms cannot be carried out if certain preconditions haven't been met. Not only is ensuring macroeconomic stability, for example, a precondition for other priorities but failure to do so can also undermine most of the progress achieved across other dimensions.

Some of the reforms identified in this chapter are already underway, but there is a risk that the present context will mask the sense of urgency of key structural reforms whose results are seen in the longer term. Continuing with the reform process is crucial, but the short-term focus in the country is, rightly so, on dealing with the macroeconomic imbalances and the pressing fiscal challenges. Sustaining a long-term commitment to policy reform on behalf of politicians, the private sector, and the population at large is challenging given the complexity and extensiveness of the reform agenda. Clearly communicating the gains and longer-term impact can help, as will political dialogue around interventions to minimize social conflict and generate the political capital needed. Over time, results achieved in these areas may serve to build political support and shift incentives.



## Prioritization process

With the long list of constraints identified throughout this Systematic Country Diagnostic (SCD), it was necessary to distinguish those that are most critical to achieving sustainable and inclusive growth. To prioritize among the constraints to growth and shared prosperity, the report uses the following criteria:

- **Impact on the twin goals:** This filter looks at the potential impact of removing a constraint on reducing poverty and increasing the welfare of the poorest 40 percent of the population.
- **Complementarities:** This filter assesses the degree to which an opportunity identified in one area might have positive impacts in other priority areas. There are strong connections across a number of the challenges, and addressing one set of constraints might also trigger or be a condition for progress in other areas.
- **Sequencing:** This filter identified those constraints that need to be tackled before others in order to achieve sustainable and inclusive growth.

In addition, the analysis reveals a number of cross-cutting priorities that need to be in place for the reform program to succeed and enable growth. These necessary cross-cutting institutional factors emerged out of several of the diagnostics on constraints.

The SCD prioritization criteria were applied throughout the prioritization process, which had five elements: (i) a diagnostic of growth, inclusiveness, and sustainability; (ii) an analytical benchmarking exercise combined with

country knowledge and SCD filters; (iii) a description of the priority areas identified; (iv) a systematic prioritization exercise to identify opportunities within the priority areas; and (v) a description of the opportunities identified (figure 5.1). The consultations resulted in broad agreement on the cross-cutting necessities and a number of priority areas albeit with some differences in view and approach.

## Priorities

Priorities are organized into two categories: (i) cross-cutting institutional factors to enable growth and (ii) thematic priorities.. Cross-cutting enablers are “drivers of success” for the more traditional thematic priorities. Enablers can magnify the effects of other reforms and their impacts on growth, inclusion, and sustainability over the long term. They tend to be institutional in nature. As highlighted in chapter 2, the architecture of Argentina’s political and economic institutions plays a fundamental role as the underling determinant of policy outcomes. Moving toward a sustainable and inclusive development model can therefore prove difficult without addressing some of the more pressing institutional challenges and governance constraints. The design and successful implementation of policies—in any sector or at any level of government—are, to a large extent, determined by the strength of the institutions and the coordination across levels. This section introduces the set of cross-cutting institutional factors to enable growth, which have emerged from the analysis and consultation process across most of the areas, and the sector-specific list of priorities identified.

Figure 5.1: Prioritization process





## Cross-cutting institutional factors to enable growth

Strengthening the independence and efficiency of accountability institutions will ensure law enforcement and reduce corruption. Transitioning toward a sustainable and inclusive development model will prove difficult without addressing some of the pressing and fundamental institutional challenges and governance constraints, including the need to ensure an impersonal application of rules (from the “rule by law” to the “rule of law”). The experience of many countries shows that constitutional constraints become self-reinforcing when power in the system is distributed evenly and when powerful elites and the political “system” accept the law’s limitations (Fukuyama 2010, 2014; North, Wallis, and Weingast 2009). For this transition to happen in Argentina, further efforts are needed to ensure better contract enforcement, an independent judiciary, and stronger accountability institutions across all levels of government to be able to prosecute and sanction corrupt behavior. Over the past three years, Argentina has made important strides in strengthening accountability and anticorruption efforts: it has passed or is discussing new or overhauled laws in the areas of corporate criminal liability, access to information, ethics and integrity, plea bargaining, and asset recovery; and accountability mechanisms have been strengthened significantly, such as those of the Anti-Corruption Office. In part, the revelations surrounding the *cuadernos* scandal—which are increasing in number and scale on a daily basis as this report is finalized—are fruits of such strengthened institutions. But this can only be a beginning of the necessary deep-rooted changes.

Supporting evidence-based decision making that uses high-quality data and information systems could contribute to reaching consensus and advancing reforms. Good, comprehensive data and information systems are necessary for the diagnosis, design, implementation, and monitoring and evaluation of key policy areas. Yet the challenges in data availability across sectors are large, and the sharing practices even within different sectors

of government can undermine policy making. In addition, transparency reforms and open data initiatives can promote rational decision making based on best available evidence. Further efforts are needed to promote the reuse of these data and the dissemination of information to increase public scrutiny. In a context of often politicized debates on where and how to allocate scarce public resources, evidence-based policy making can help bridge the ideological divide and support a rational debate about policy goals and strategic priorities. By centering on expected outcomes and rigorous assessment of the impact of public policies, an evidence-based approach can help government focus policy making on effectiveness of social interventions and efficiency of resource use. This approach can help mitigate polarization among political and economic actors and increase the chances of bipartisan agreement.

In addition, Argentina can establish institutionalized spaces for consultation and public deliberation to increase the legitimacy of proposed policy trajectories and maximize compliance by all stakeholders involved in the reform process. The process whereby policies are adopted and implemented is as important for success as the specific content of such policies. For this reason, the adoption of important policy and regulatory reforms across sectors should involve the creation of institutionalized spaces where multiple interest groups, business associations, and ordinary citizens can have a bigger say in the content of the proposed reform. The public nature of such spaces will be critical to reduce risks of capture, thereby rebalancing the influence of more powerful interest groups. The recent experience of subsidy reforms suggests that public deliberation and participation mechanisms can also be an effective—and legally enforced—mechanism to overcome polarization and increase support for highly contested reforms, achieve early wins, and mitigate adjustment costs.<sup>1</sup> This strategy is particularly relevant for regulations aimed at improving the business environment because compliance is usually higher as a result of the co-participation of various actors in the decision-making process.

<sup>1</sup> Subsidies to energy and transportation were introduced in 2006 to dampen the impact of rising prices and protect incomes of the poor. These



Making federalism work by promoting cooperative behavior across governmental levels will be central to ensure successful implementation of policies. As indicated above, the need to provide homogeneous services across heterogeneous provinces generates perverse expenditure and revenue collection incentives, resulting in substantial fiscal challenges. Historically, the policy instruments and processes used to negotiate these distributional tensions between the national and provincial governments, (including *participaciones* to provinces, public transfers, pensions, subsidies, and taxation) have made it difficult for Argentina to achieve its long-term development objectives. Moreover, in many cases, decision making and implementation are decentralized to various regulatory agencies, without appropriate coordination mechanisms, which leads to increased fragmentation and undermines the capacity of the federal government to guide implementation. Argentina therefore urgently needs to make federalism work by promoting more cooperative behavior in which national, state, and local governments interact cooperatively and collectively to solve common problems. To this end, stronger central coordination would assist in making government actions more coherent and aligned with the overall strategic priorities and orientation of the country's development agenda. Coordination of policies can be improved also promoting reforms (such as those needed in education) that create incentives for subnational governments to improve public spending efficiency and comply with national policy guidelines and regulations, similar to the existing ones used in the health sector (*Plan Sumar*). Although the institutional architecture that defines the nature of fiscal federalism in Argentina is hard to change in the short term, the "fiscal pact" signed in November 2017 by the federal government and 23 of 24 provinces<sup>2</sup> suggests there might be opportunities to introduce incremental

improvements in the intergovernmental fiscal transfer system. These improvements could include the rollout of federal guidelines on public financial management to better monitor expenditures and promote more efficient allocation of resources. In this sense, incentives could be provided for the provinces in the form of results-based grant schemes and conditional transfers that reward efficiency in public spending, prudent fiscal management, and compliance with federal guidelines, policy regulations, and jointly agreed reform priorities. The Council of Australian Governments may serve as an example for Argentina's ongoing efforts to institutionalize rules-based forms of coordination and cooperation between the federal government and the provinces (box 5.1).

## Thematic priorities

Inclusive and sustainable growth will require progress on both equity and productivity fronts, as well as ensuring macroeconomic stability and enhancing environmental sustainability. The analysis done as part of the SCD process identified a large set of economic priorities with 12 considered to be core. These priorities have been also assessed in terms of their impact on the twin goals, their complementarity with the rest of the priorities, and their role as essential preconditions to the successful achievement of the remaining priorities. This assessment is presented in table 5.1 and has been largely confirmed through the systematic consultation with national and international experts. Thematic priorities are grouped according to the pathways toward inclusive and sustainable growth: (i) putting the macroeconomic fundamentals in place, (ii) opening the economy, (iii) fostering an inclusive economy, and (iv) investing in natural capital and ensuring environmental sustainability.

subsidies reached almost 5 percent of GDP by 2016. Families paid on average between 15 and 20 percent of the total cost of the subsidized services, with a large proportion of the subsidies going to the middle class and the rich. After two months in office, the new government announced that energy subsidies were to be phased out gradually until 2019, and it created a social tariff system to protect low-income households. A few months after the announcement, the Supreme Court ruled that the hike in gas prices was illegal and must be postponed until the government organized public deliberations, as required by the constitution. These were held in September 2016, and the tariff change was passed a month later. Since then, new tariff increases for both piped gas and electricity were preceded by similar public deliberations with the active participation of civil society (the last one took place November 13–17, 2017).

<sup>2</sup> The agreement addresses some of the long-lasting fiscal disputes between different levels of government in Argentina. Its mechanisms include the implementation of fiscal rules, the gradual reduction of distortive taxes at the provincial level, the resolution of lawsuits against the federal government, political support to change the pensions indexation formula, and a partial redesign of the revenue transfer system to compensate for the historical discrimination of the Province of Buenos Aires. The draft bill is expected to be sent to each subnational congress for ratification.





### Box 5.1. Setting incentives to promote intergovernmental cooperation: The Australian experience

The Council of Australian Governments (COAG), established in 1992, is the highest-level intergovernmental forum in Australia, comprising the prime minister (chair), state premiers, territory chief ministers, and the president of the Australian Local Government Association. The role of COAG is to initiate, develop, and monitor the implementation of policy reforms that are of national significance and that require coordination and cooperative action by Australian governments. Where formal agreements are reached, these may be embodied in intergovernmental agreements, including National Agreements and National Partnership Agreements. COAG has a strong record of driving reforms that have improved the lives of all Australians. For example, the package of economic reform policies linked to national competition policy in the mid-1990s left a legacy of a more competitive, efficient, and flexible economy that has enabled Australia to meet key economic challenges in the last 20 years.<sup>a</sup>

Australia's National Competition Policy (NCP) linked untied performance grants to states achieving certain regulatory reform objectives intended to promote economic growth. An important feature of the institutional framework was the use of financial incentives — in the form of performance-based grants — made by the Australian Government to the States and Territories to 'return' the fiscal dividend from their implementation of agreed reform commitments. Prior to the scheduled payment of the transfer in each year, an independent body — the National Competition Council (NCC) — assessed whether each State had met the specified performance targets and provided recommendations for consideration by the Australian Government in terms of rewards or sanctions (reduction of the size of the grant to be transferred). The NCP is recognized as having made a significant contribution to Australia's welfare, aligning the incentives of central and state government toward meeting jointly-defined reform commitments. The Australian experience also demonstrates that the grants involved need not be large, because the policy was based on an intergovernmental agreement and a mutually accepted settlement scheme rather than imposed from above.

a. Information from COAG's website, <http://www.coag.gov.au/>.

Source: Parker 2009; Commonwealth of Australia 2009.

Proper sequencing of the reforms will be a key element for government actions. Although the priorities identified in the table below are fundamental for sustainable and inclusive growth, the sequencing of reforms is essential for success. Macroeconomic instability, as mentioned before, is a basic precondition for the success of the reform effort. It is also undeniable that improving the quality of social spending and investing in human capital are priorities that will see their fruits in the medium and long run, but today's inaction can prove costly. Within some of the priorities, sequencing of specific measures is also fundamental—for example, deepening domestic competition prior to successfully integrating the country into the global economy. International experience with

implementing large structural reforms reveals substantial potential gains; however, prior experience has also shown that proper sequencing and monitoring are essential to success. Comprehensive reform programs to deepen competition and open up the economies to trade and investment in Australia, Mexico, and Sweden took a decade or more to put in place. In addition, appropriate interinstitutional coordination at the federal level and between the national and subnational governments, as well as public-private dialogue, is required to achieve early wins and consolidate the reform process. Finally, improving infrastructure spending appears not only as a precondition but also to have strong complementarities with other policies identified.



TABLE 5.1. HEAT MAP WITH FILTERS

Priorities (12 highest out of 29)	Impact on twin goals	Complementarities	Sequentiality
Ensure sound macroeconomic management	000	000	000
Improve fiscal policy for growth and equity	00	000	000
Improving infrastructure	000	000	000
Develop and deepen financial and capital markets and household access to credit	00	00	0
Increase integration into the global economy	0	00	0
Reduce barriers to competition and lower logistic costs	00	0	0
Improve the quality and relevance of education	000	000	000
Increase the efficiency of spending in health and education while ensuring equal quality for all	000	000	000
Close the gaps in the provision of basic infrastructure services	00	00	00
Ensure pensions are sustainable	00	0	0
Harness natural capital endowments through policies and investments	0	0	0
Foster climate smart growth for the short and the long-term	00	00	0

*Note:* The number of boxes next to each of priorities reflects the average importance of the priority for each of the filters, as derived from the analysis and confirmed by polling with internal and external stakeholders. 000 denotes that the priority is “very important” for the relevant filter; 00 denotes that the priority is “important” and that a high proportion of consulted stakeholders confirmed this; and 0 denotes that, although the priority is “important,” a lower proportion of consulted stakeholders consider it so.

The prioritization exercise suggests two tiers of priorities. Reforms included in the first tier are of first-order relevance, or very important across the three filters. These priorities include sound macroeconomic management, better infrastructure, improved quality and relevance of education, and increased efficiency of spending. Improved fiscal policy for growth and equity can be pooled in the first-tier group, though with slightly less impact on the twin goals. A second tier is headed by closing the gap in the provision of basic infrastructure services, important across the three dimensions, and includes the other priorities that have varying degrees of importance across the three filters.

### First-tier reforms

These reforms are led by sound macroeconomic management, which is also key in the short run, given current financial distress. This reform builds from the diagnosis that macroeconomic mismanagement and frequent economic policy reversals have been a source and outcome of successive boom-and-bust cycles and welfare swings. In this context macroeconomic stability is a precondition for the actual unfolding of the reform agenda. This is tightly linked to an improved fiscal policy for growth and equity because sound macroeconomic management also entails a rebalancing of fiscal policy



to reduce economic distortions and have an expenditure and tax policy that better supports growth and equity. Public expenditure needs to move to a sustainable level in relation to economic output. Given the size of current fiscal imbalances, a fiscal consolidation is essential to stabilize public debt. Cuts to subsidies and other inefficient government programs need to continue, and the medium- to long-term aim should be to increase the share of spending on growth-enhancing measures such as priority public investment projects. The tax system needs to be redesigned to reduce the weight of distortionary taxes and to broaden the tax base. This should include a clear definition of expenditure responsibilities across different levels of government, a sound intergovernmental fiscal transfer system to ensure the efficient and equitable provision of public services, and improved subnational revenue-collection incentives.

Enhancing infrastructure is also seen as an objective of first-order importance. The quality of Argentina's infrastructure stock is deteriorating, and this poses a challenge to competitiveness. Infrastructure investment is historically low, with very low participation of private sector financing, and is unlikely to grow much because of limited fiscal space. Moreover, logistics performance indicators are generally lagging. Good infrastructure and lower logistic costs are key to Argentina's ambitions in terms of growth. Although financing is a key bottleneck, more focused national and territorial goals and efficient strategies can substantially reduce financing needs. In addition, upstream reforms will enable Argentina to both improve spending efficiency and attract private financing on better terms—whether through public–private partnerships or through commercial borrowing by public enterprises. Efforts to improve public investment institutions and frameworks—notably budgeting and procurement systems—should enable the country to substantially stretch the resources it already allocates to infrastructure. An improved framework for infrastructure planning, financing, and investing will be a key driver of competitiveness.

Two first-tier reforms are related to fostering an inclusive economy: improving the quality and relevance of

education, and increasing the efficiency of health and education provision while ensuring equal quality for all. On the quality and relevance of education, school readiness and early literacy skills are low, despite relatively high coverage. A focus on quality will also call for strengthening teachers' careers by improving training curriculum, consolidating the network of training institutes, and creating the conditions to attract teachers and motivate them to perform. Recent reforms establishing annual standardized testing of students' learning outcomes, enforcing the communication of results to schools, and pre-service teachers' evaluations should contribute toward focusing the system on quality, although teacher evaluations are still pending. In fact, resistance by teachers' unions to education reforms are generally focused on changes in teachers' professional development. In addition, it will be essential to revamp secondary education, focusing on developing critical basic cognitive and (21st-century) soft skills in line with *Secundaria 2030*.

With respect to increased efficiency in health and education, completion rates are low, learning outcomes are poor, and health outcomes high and unequal across provinces. Unequal access to quality services and inefficiencies reflect highly fragmented systems that lack coordination mechanisms across systems and subnational entities. Increasing efficiency will require making policies that are increasingly guided by evidence to help identify cost-saving initiatives, and a solid system of monitoring and evaluation. In health, efficiency could be substantially improved by establishing an appropriate model of care, where (i) several providers, including a main primary care provider, work together in an integrated, coordinated manner to provide care for an individual (with integrated information systems) and (ii) there is an emphasis on actively expanding effective coverage at the primary care level. As a result of these efforts, the health system would indeed be better placed to strengthen the prevention and control of noncommunicable diseases, especially in the context of an aging population. This also calls for the reduction of common risk factors associated with these diseases, such as unhealthy diets (particularly among



children, where obesity is high), physical inactivity, tobacco use, and alcohol abuse.

## Second-tier reforms

This group of very relevant reforms with a slightly lower level of priority is led by closing the gap in the provision of basic infrastructure services. Broad disparities persist in basic services, informal settlements, and connective infrastructure across regions and within large agglomerations. Access to safely managed water and sanitation services varies significantly across regions and between the core and the peripheries of large cities. There are 4,000 informal settlements in the country. Closing basic infrastructure service gaps, investing in connective infrastructure, and strengthening local capacity will be key for the convergence of living standards and for linking populations to economic opportunities. This will require enhancing integrated planning across different sectors, as well as widening the financial options and developing clear mechanisms to set up transparent systems of fiscal transfers across different levels of government.

A closely related priority refers to the development and deepening of financial and capital markets and household access to credit, which could be thought of as access to basic financial services. Argentina's very shallow financial markets reflect a gap in mechanisms that could better support growth, infrastructure, housing, and enterprise development for the private sector. Households, particularly those that are more vulnerable, have limited access to credit for productive investment and asset accumulation. Poorer people rely on personal loans or credit cards, with high interest rates. Expanding credit and mortgage markets will be essential. The new legal frameworks are encouraging, but substantial regulatory and institutional rollout measures are needed to ensure that financial and capital market products can operate in an enabling environment. These measures will also ensure that the government works with the private sector in developing new and innovative instruments to promote long-term finance for productive purposes and to generate new asset classes of financial instruments that can be more transparently priced and traded.

Two reforms directly linked to the open economy development strategy stand out for their impact on the twin goals and complementarities: increasing integration into the global economy and reducing barriers to competition and lower logistic costs. Key trade policy actions include lowering tariffs and nontariff measures in priority sectors, unilaterally reducing nontariff measures in input products, removing nonautomatic licenses to increase predictability, and boosting regional integration agreements to increase market access. Competition and trade authorities can further coordinate to harmonize technical standards with trade partners. To improve investment policy, Argentina can revise the incentives framework, introduce effective policies to promote links with local suppliers, and set up comprehensive regulatory improvement and simplification mechanisms. Jointly among competition and investment promotion authorities, the government can open up key sectors to investment. On the competition and logistics side, Argentina can continue strengthening its anticartel enforcement, implement the recently overhauled merger control framework, strengthen pro-competition sector regulation in key sectors such as telecommunications and transport, and implement competitive neutrality principles to ensure that public and private operators compete on a level playing field. The competition authority will need to be well-resourced, prioritize its engagements and actions, and achieve technical independence.

Two priorities on natural capital and environmental sustainability stand out. On the one hand, "foster climate-smart growth for the short and the long term" relates to the climate impacts that are rapidly coming to the fore of Argentines' lives and economic activities. Whereas appropriate adaptation policies in key sectors including agriculture, water, energy, and health can help deal with impacts in the present, a more systemic approach can offer more robust outcomes. By the end of this century, under an extreme emissions scenario, the projected warming could reach an average change of about 3.5 degrees Celsius in the north of the country, relative to present-day conditions. This will produce important social, economic, and environmental impacts that will require strong policy shifts. Priorities to adapt to climate change involve proper



### Box 5.2. SCD consultation process

During the SCD preparation, the team carried out broad and intensive consultations both within the World Bank Group and with a large number of relevant stakeholders in the country. These consultations, carried out jointly by the World Bank and the International Finance Corporation, helped identify the key challenges and constraints, and the crucial analytical pieces that fit into the analysis. Internal consultations in Buenos Aires and Washington, DC, began during July–August 2017 and included the broader Argentina country team, the Latin America and Caribbean Chief Economist office, the Environment Chief Economist Office, the Global Practices, and the Country Management Unit. They continued throughout the preparation of the SCD, and in the last phase they included several country team meetings for the internal prioritization exercise. A list of external participants can be found in appendix E.

External consultations were held in Argentina on several occasions. A first round took place in Buenos Aires during November and early December 2017, with experts, civil society, private sector representatives, and politicians. These discussions were crucial to validate the diagnosis and receive feedback on emerging priorities. Given the SCD's emphasis on institutional constraints to development, the team organized a one-day closed-door workshop on the political economy of institutional reforms in November 2017, targeting high-level politicians (including former presidential candidates, congressional representatives, and provincial ministers), the private sector (International Finance Corporation clients NXTP, Vicentin, Afluenta, and CMF), and national academics (including institutional economists and political scientists). The meeting was chaired by the country director and facilitated by a local nongovernment organization, *Fundación RAP (Red de Acción Política)*, and organized in two sessions. In the first session, the discussion aimed at validating and enriching the team's preliminary diagnostics by identifying a long list of institutional reforms (20) needed to address the most important constraints to inclusive and sustainable growth. In the second session, a short list of reforms was prioritized according to their potential for economic impact and their political/social feasibility. Among the reforms that are perceived as most impactful and most likely, the following were highlighted: addressing educational challenges, clarifying functions and responsibilities across levels of government, and improving efficiency and transparency of national and subnational expenditures. A second round of consultations took place in March 2018 with a select group of cross-sectoral experts who examined and validated the preliminary priorities.

A second round of consultations—held between April and May—involved presenting the set of identified constraints to external audience, in order to further validate the list of priorities and ensure the widest consensus around the proposed policy recommendations. This second round included, first, a meeting with three renowned academics, each asked to comment on the pillars of growth, inclusion, and sustainability. Guiding the discussion pillar by pillar resulted in a wide discussion that went beyond the specific areas of interest of each of the guests; this wider discussion helped the team bring the different elements together into a coherent story. In addition, a follow-up closed-door event—which included high-level politicians, members of the academia, and the private sector—was carried out in collaboration with *Fundación RAP*. There was an overall consensus on the identified priorities. Importantly, there was strong support for the report's emphasis on the institutional foundations as the necessary preconditions for successful implementation of the proposed technical priorities.



costing of climate action, contingency planning, and a closer integration between the mitigation and adaptation agendas.

On the other hand, “harness natural capital endowments through policies and investments” stresses the need to leverage natural resources for growth in a sustainable way. Natural capital in Argentina includes agricultural soils and pastures, water, forests, fisheries, strong wind and solar potential, and subsoil assets (oil, gas, coal, and minerals). Some assets, particularly forest ecosystems and fisheries, are under significant pressures. Argentina has lost 21 percent of its forest cover in less than 25 years. At the same time, fish stocks have suffered from overexploitation because the country lacks a national management plan for sustainable and responsible fishing with a long-term vision. Yet these resources, along with the strong renewable energy potential, can be important sources of economic rents, jobs, and sustainable livelihoods. Unleashing the potential of natural capital requires breaking with the extractive policies of the past and consolidating a policy framework that attracts private sector investments. Policies, incentives, and enforcement are also required to ensure that the open access that characterizes many natural assets, such as forests, land, and fisheries, does not give way to illegality and degradation. Finally, a more sophisticated demand for greener attributes in global value chains is already emerging, and Argentina has much to gain from developing information mechanisms in support of labels and practices that encourage the thriving green businesses throughout the country.

Finally, an additional item will become increasingly important as Argentina’s population ages: the need for a social consensus to ensure pensions are sustainable. Pensions are fundamental for protecting the income of the elderly population: poverty rates would be substantially higher without the recent reforms that expanded coverage. Two-thirds of the moratorium goes to the three poorest deciles. But, with 11 percent of GDP already going to pensions, the mid-term sustainability is not

currently guaranteed given the demographic transition and the current rules. There is a need to consider options that balance the high levels of generosity (which has recently increased with the Reparación Histórica that recalculated and adjusted benefits retroactively and going forward) with the broad coverage while ensuring future sustainability. This is particularly important as the government starts discussions on a future pension system reform. In this sense, the December 2017 parametric reform will help make the system more sustainable by changing the pension indexation mechanism to one that ties benefit changes more closely to changes in prices (and up to a minor extent to changes in wages). Nonetheless, it would be desirable also to broaden the agenda to revise all the parameters and components of the system, both contributory and noncontributory.

## Knowledge and analytical gaps

The SCD also underlines critical knowledge gaps and areas for further research in Argentina. The most salient areas are described in table 5.2.





TABLE 5.2. DATA AND KNOWLEDGE GAPS

Sector	Data and knowledge gaps
Agriculture	<ul style="list-style-type: none"> <li>- Characterization and trends of family farming.</li> <li>- Economic complexity analysis for the sector.</li> <li>- Analysis of the effect of land ownership on productivity growth</li> <li>- Distributional implications of current policies for the sector</li> </ul>
Education	<ul style="list-style-type: none"> <li>- Early childhood development (ECD) assessments and detailed data on the quality of ECD is not available, as well as on teacher practices and school management skills.</li> <li>- Detailed diagnostic of the sources of inefficiencies in the education sector and the identification of successful interventions to reduce school dropout in Argentina.</li> </ul>
Environment and natural resources	<ul style="list-style-type: none"> <li>- Understand causality between poverty and deforestation in rural area.</li> <li>- Understand environmental and social impacts to oil and gas development.</li> <li>- Air quality and health impact assessment with local epidemiology data. Cost of environmental degradation.</li> </ul>
Health, Population and Nutrition	<ul style="list-style-type: none"> <li>- Recent household survey to assess the health status of the population or the quality of the provision of health services provided</li> </ul>
Growth, Macroeconomics and Fiscal Management	<ul style="list-style-type: none"> <li>- Official, homogeneous and updated data on Provincial GDP.</li> <li>- Firm-level microdata for productivity analyses.</li> <li>- Access to administrative records the tax system (equity and efficiency issues).</li> <li>- Full assessment of the monetary and fiscal frameworks under fiscal dominance. Full assessment of the monetary framework under</li> </ul>
Poverty and Labor Markets	<ul style="list-style-type: none"> <li>- Poverty and labor market household survey data for rural and small urban areas that will allow for national estimates currently nonexistent</li> <li>- Data and analysis of economic mobility across time for more than one-year period, and of economic mobility across generations.</li> </ul>
Social Protection and Labor	<ul style="list-style-type: none"> <li>- Data to estimate skill mismatch, linking type of skills demanded by the productive sector that can be matched to supply (labor force survey)</li> <li>- Information on the type of task performed by workers in their occupation, and task content.</li> <li>- Government social spending (national and provincial) cannot be analyzed by age group, considering not only cash transfers but also in-kind transfers.</li> </ul>
Trade, Investment and Competition	<ul style="list-style-type: none"> <li>- Analysis of productivity distributions within industries and the barriers to intra-industry reallocation.</li> <li>- Firm level data that can be used for panel estimates and matching with household surveys, employment data, and trade data, is scarce.</li> <li>- Innovation surveys discontinued in 2010 should be rebuilt.</li> <li>- Better data on services, a dynamic sector, would allow for better policy formulation.</li> </ul>



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## APPENDIX A. POVERTY MEASUREMENT IN ARGENTINA

All of this report's data attributed to "SEDLAC (CEDLAS and the World Bank)" rely on a harmonized version of the urban-only household survey data from the Encuesta Permanente de Hogares–Continua (EPHC). The EPHC is collected by Argentina's Instituto Nacional de Estadística y Censos (INDEC) on a continuous basis, and reported quarterly. The survey is representative of 63 percent of the population, living in the 31 largest urban areas in the country. The harmonization undertaken by CEDLAS and the World Bank increases the comparability of household surveys among various Latin American and Caribbean countries, allowing for internationally comparable indicators. Poverty rates are estimated using a US\$5.50 per person per day poverty line, adjusted to US\$ in 2011 purchasing power parity.

Several issues affected comparisons in official poverty rates over the years. First, official poverty statistics produced by INDEC were under critiqued from 2007 to 2013, primarily because of concerns over the consumption price index used to update the poverty line. Second,

from 2013 to 2015, official estimates were not released. Third, although INDEC relaunched the publication of this indicator for the second quarter of 2016, it indicated that its value was not comparable with previous numbers because of methodological changes as well as changes related to the use of more up-to-date information on consumption patterns to define the poverty line. Finally, different changes related to the treatment of missing income information and the projections of population growth were introduced in the EPHC since 2003 that affected comparability.

International poverty estimates (SEDLAC dataset) are able to overcome some of these difficulties. For the period 2007–16, local inflation comes from private estimates. These estimates do not address changes in the treatment of missing information on incomes and in the projections of population growth, which could affect poverty levels. However, differences in levels are not significant and, importantly, do not modify the trends of different indexes.



## APPENDIX B. PROFILE OF THE POOR AND THE BOTTOM 40

Second semester, 2016 (31 largest cities)	Total	Poverty (\$5.50/day line)		Shared prosperity		
		Poor	Nonpoor	B40	T60	T10
Poverty rate and bottom 40						
Share of population	100.0	7.8	92.2	40.0	60.0	10.0
Share of households	100.0	4.9	95.1			
Recent immigrants	100.0	22.6	77.4	45.1	54.9	19.2
Regions						
GBA	100.0	7.2	92.8	37.5	62.5	11.9
Pampeana	100.0	8.8	91.2	38.9	61.1	9.3
Norte grande	100.0	9.1	90.9	52.7	47.3	4.5
Cuyo	100.0	9.1	90.9	45.7	54.3	4.7
Patagonia	100.0	3.0	97.0	25.8	74.2	15.4
Demographic characteristics of poor, nonpoor, and bottom 40						
Households with female head (%)	39.3	48.5	38.8	40.0	39.0	41.2
Households with four or more members (%)	35.9	72.3	34.1	68.8	23.3	7.7
Average household size	3.1	4.9	3.0	4.4	2.6	1.8
Dependency ratio						
Children (aged 0–14) per adult (aged 15–64)	0.4	0.9	0.3	0.7	0.2	0.1
Elderly (aged 65+) per adult (aged 15–64)	0.1	0.0	0.2	0.1	0.4	0.1
Age groups						
Children (aged 0–14)	22.4	41.4	20.8	34.6	14.2	6.8
Adults (aged 15–64)	65.1	57.0	65.8	62.2	67.0	70.3
Elderly (aged 65+)	12.5	1.7	13.5	3.1	18.8	22.9



Second semester, 2016 (31 largest cities)	Total	Poverty (\$5.50/day line)		Shared prosperity		
		Poor	Nonpoor	B40	T60	T10
(selected) Assets and labor outcomes of the poor, nonpoor, and bottom 40						
Access to basic services (% of HHs)						
Access to safely managed water	99.6	97.9	99.7	99.0	99.8	99.9
Access to safely managed sanitation	69.1	41.7	70.5	51.2	76.0	89.7
Less than 1.5 people per room	96.4	79.1	97.3	88.6	99.5	100.0
Precarious location	1.9	6.4	1.7	3.5	1.3	0.7
School attendance						
Children (aged 3–5)	96.0	96.2	96.0	95.1	97.5	100.0
Children (aged 14–18)	85.2	76.9	86.4	81.4	90.2	98.1
Coupled deprivations (% of its age group)						
Children (aged 3–17) out of school and no safely managed water and sanitation	0.9	2.3	0.7	2.8	1.0	0.0
Youth (aged 18–25) not studying or working	24.9	51.0	22.2	37.2	13.8	3.0
Elderly (aged 65+) in precarious dwelling and no safely managed water and sanitation	26.4	68.9	25.9	48.6	23.5	8.6
Adult (25+)						
Below complete secondary	45.0	71.0	43.7	64.2	37.2	14.8
Complete secondary and above	55.0	29.0	56.3	35.8	62.8	85.2
Labor (aged 18+)						
Unemployment rate	8.0	30.6	6.9	15.2	4.8	1.3
Nonregistered wage earners (as % of wage earners)	32.1	77.2	30.7	55.7	23.3	11.7
Self-employed (as % employed)	17.7	23.0	17.5	24.1	17.4	14.9

Source: Encuesta Permanente de Hogares–Continua, 2016 second semester.

Note: Representative of 63 percent of the national population. For reference, the \$5.50 per day line per person (in 2011 purchasing power parity) is closer to the national extreme poverty line, which is on average about \$4.60 per person per day. The national poverty line is on average for all regions about \$11.40 per person per day (2011 purchasing power parity). Bottom 40 (B40) = bottom 40 percent of the income distribution; GBA = Greater Buenos Aires; HH = household; T10 = top 10 percent of the income distribution; T60 = top 60 percent of the income distribution.

## APPENDIX C. SELECTED WORLD BANK GROUP ANALYTICAL WORK

Sector	Selected World Bank Group Analytical Work
Agriculture	<ul style="list-style-type: none"> <li>- Argentina Agriculture Sector Report (World Bank 2016)</li> <li>- Logística de la Soja—Argentina, Uruguay, Paraguay (Gauthier et al. 2016)</li> </ul>
Education	<ul style="list-style-type: none"> <li>- Argentina, Notas de Políticas Públicas para el Desarrollo. Capítulo 7: “Mejorar la calidad de la educación.” (World Bank 2015b)</li> <li>- World Development Report 2018: Learning to Realize Education’s Promise (World Bank 2018b)</li> </ul>
Energy and extractives	<ul style="list-style-type: none"> <li>- Diagnóstico de la Prestación de Servicios de Agua, Saneamiento y Electricidad en 10 Provincias del Norte Argentino</li> <li>- Argentina, Notas de Políticas Públicas para el Desarrollo. Capítulo 1: “El Futuro de los Subsidios Residenciales en Argentina.” (World Bank 2015b)</li> </ul>
Environment and natural resources	<ul style="list-style-type: none"> <li>- Argentina Country Environmental Analysis (World Bank 2016a)</li> <li>- Argentina: Cambio Climático Proyectado y su impacto en la agricultura (2050–2100). (Fernandes 2016)</li> <li>- Inclusive Green Growth. The Pathway to Sustainable Development (World Bank 2012b)</li> <li>- The Changing Wealth of Nations (Lange, Wodon, and Carey 2018)</li> </ul>
Governance	<ul style="list-style-type: none"> <li>- World Development Report 2017: Governance and the Law (World Bank 2017b)</li> </ul>
Health, Population and Nutrition	<ul style="list-style-type: none"> <li>- Argentina: Toward Universal Health Care Coverage (World Bank 2017d)</li> <li>- “Results-Based Financing for Health in Argentina: The Plan Nacer Program” (Cortez et al. 2012)</li> <li>- “Rewarding Provider Performance to Enable a Healthy Start to Life: Evidence from Argentina’s Plan Nacer” (Gertler, Giovagnoli, and Martinez 2014)</li> <li>- “Long-Run Effects of Temporary Incentives on Medical Care Productivity” (Celhay et al. 2015)</li> </ul>
Growth, Macroeconomics and Fiscal Management	<ul style="list-style-type: none"> <li>- “The Anatomy of a Multiple Crisis: Why Was Argentina Special and What Can We Learn from It?” (Perry and Servén 2003)</li> <li>- “The Credibility of Economic Policy Making in Argentina, 1989–2015” (Rosenblatt 2016)</li> <li>- Argentina: Country Partnership Strategy for the Period of FY2015–18. (World Bank 2014b)</li> </ul>
Poverty and Labor Markets	<ul style="list-style-type: none"> <li>- “Wage Inequality in Latin America: Understanding the Past to Prepare for the Future” (Messina and Silva 2018).</li> <li>- “Shared Prosperity and Poverty Reduction in Urban Argentina”. (Cord et al. 2015)</li> </ul>
Social Protection and Labor	<ul style="list-style-type: none"> <li>- Argentina, Notas de Políticas Públicas para el Desarrollo. Capítulo 3: “Protección social y trabajo en Argentina.” (World Bank 2015b)</li> <li>- World Development Report 2013: Jobs (World Bank 2013)</li> </ul>



Sector	Selected World Bank Group Analytical Work
Social, Urban, Rural and Resilience	<ul style="list-style-type: none"> <li>- Leveraging the Potential of Argentinean Cities (Muzzini et al. 2017)</li> <li>- World Development Report 2009: Reshaping Economic Geography (World Bank 2009)</li> <li>- Raising the Bar for Productive Cities in Latin America and the Caribbean (Ferreira and Roberts. 2018)</li> </ul>
Transport and ICT	<ul style="list-style-type: none"> <li>- Argentina Transport Engagement Strategy (World Bank 2017f)</li> <li>- “Northwestern Road Development Corridor Project” (World Bank 2017a).</li> <li>- Argentina, Notas de Políticas Públicas para el Desarrollo. Capítulo 5: “Inversión en la Anticuada Infraestructura de Argentina.” (World Bank 2015b)</li> </ul>
Trade and Competitiveness	<ul style="list-style-type: none"> <li>- Strengthening Argentina’s Integration in the Global Economy: Policy Proposals for Trade, Competitiveness, and Investment (Martinez Licetti et al. 2018)</li> <li>- Trouble in the Making? The Future of Manufacturing-Led Development (Hallward-Driemeier and Nayyar 2017)</li> <li>- “Convergence to the Managerial Frontier” (Maloney and Sarrias 2017)</li> <li>- The Innovation Paradox: Developing-Country Capabilities and the Unrealized Promise of Technological Catch-Up (Cirera and Maloney 2017)</li> <li>- “Investment in ICT, Productivity, and Labor Demand : The Case of Argentina” (Brambilla and Tortarolo 2018)</li> </ul>
Water	<ul style="list-style-type: none"> <li>- Diagnóstico de la Prestación de Servicios de Agua, Saneamiento y Electricidad en 10 Provincias del Norte Argentino (World Bank 2017e)</li> </ul>

## APPENDIX D. DATA DIAGNOSTICS FOR WORLD BANK GROUP CLIENT COUNTRIES

PREPARED BY THE DEVELOPMENT DATA GROUP OF THE WORLD BANK. COUNTRY: ARGENTINA

Section 1: General Information about the Statistical System						
Legal status of NSO	Agency of the Secretariat of Economic and Regional Planning in the National Ministry of Economy and Public Works and Services					
Statistical Legislation (latest)	Statistics Law, 1968, 1993					
NSDS/Statistical masterplan	Los lineamientos del Programa Estadístico Nacional 2007–11					
Section 2: Micro data						
Type of census/survey	Latest (Year)	Second latest (Year)	Representativeness	Data accessibility	Optional disaggregation (Y/N)	
					Sex	Regional
Censuses						
Population census	2010	2001	National	External repository	—	—
Agriculture census	2018	2008	—	—	—	—
Business/establishment census	2004–05 <sup>a</sup>	—	—	—	—	—
Household survey on income/consumption	2018 <sup>b</sup>	2017	Urban settlements (61% of total population)	External repository	Y	Y
Household survey on education	MICS 4 2011–12					
	—	—	—	Y	—	
Household survey on health	2013 National Survey on Sexual and Reproductive Health (ENSSyR) 2013 National Survey of Risk Factors (ENFR) <sup>c</sup>	MICS 4 2011–12	—	—	—	—
Labor force survey	2018	2017	Urban settlements	External repository	Y	Y
Business/establishment survey	Enterprise Survey 2010	Enterprise Survey 2006	National	External repository	—	—

a. National Economic Census 2004/05, [https://www.indec.gob.ar/cne2005\\_index.asp](https://www.indec.gob.ar/cne2005_index.asp).

b. Encuesta Permanente de Hogares Continua 2017, <http://microdatalib.worldbank.org/index.php/catalog/9423>.

c. Instituto Nacional de Estadística y Censos, <https://www.indec.gob.ar/bases-de-datos.asp?solapa=2>.



Section 3: Macro data				
Does the country subscribe to the IMF SDDS or participate in the eGDDS? If SDDS	SDDS			
	Periodicity		Timeliness	
	SDDS	Country	SDDS	Country
National accounts: GDP by production and expenditure at current and constant prices	Q	Q	1Q	NLT 1Q
Consumer price index	M	M	1M	NLT 2W
Central government operations	M	M	1M	1M
Balance of payments	Q	Q	1Q	NLT 1Q
External debt	Q	Q	1Q	NLT 1Q
Merchandise trade	M	M	8W (4–6W encouraged)	3W
Production index	M	M	6W (1M encouraged)	NLT 1M
Employment	Q	Q	1Q	75D
Unemployment	Q	Q	1Q	75D
Producer price index	M	M	1M	3W

Section 4: Compliance with WBGs core data standards			
	WBG Standard	Compliant (Y/N)	Actual yearly interval or %
Household survey of income or consumption	One every 3 years	Y	1 year
PPP price survey	One every 3 years	N	12 years
CRVS	80% of births registered	Y	na
	60% of deaths registered with cause of death	Y	na

Section 5: STATISTICAL CAPACITY INDICATORS (2017)	
Method	80.0
Source Data	90.0
Periodicity	86.7
Overall	85.6

Section 6: DATA OPENNESS INDICATORS	
Open Data Barometer Score	23.78
Open Data Index Score	60%

Note: CRVS = ; eGDDS = ; IMF = International Monetary Fund; M = ; MICS = ; NLT = ; NSDS = ; NSO = ; PPP = ; Q = ; SDDS = ; W = ; WBG = World Bank Group.





## APPENDIX E. CONSULTATIONS

THE SYSTEMATIC COUNTRY DIAGNOSTIC TEAM CONDUCTED EXTERNAL CONSULTATIONS WITH SPECIALISTS AND STAKEHOLDERS FROM THE FOLLOWING ORGANIZATIONS:

Type	Detail
Universities and nongovernmental organizations	Universidad Austral
	Universidad Católica Argentina
	Universidad de Buenos Aires
	Universidad de la Plata (CEDLAS)
	Universidad del CEMA
	Universidad Di Tella
	Universidad Nacional de San Martín
	CADE
	CEDES
	CIPPEC
	Educar 2050
	FARN
	Fundación RAP
	Fundación Vida Silvestre
	Genesis
Government organizations	Instituto Nacional de Asuntos Indígenas
	Organización de Estados Iberoamericanos para la Educación
Private firms and consulting companies	A16
	Afluenta
	Bain & Company
	Banco CMF
	Celulosa Argentina
	Despegar
	Econviews
	Farmacity
	HSBC



**THE SYSTEMATIC COUNTRY DIAGNOSTIC TEAM CONDUCTED EXTERNAL CONSULTATIONS WITH SPECIALISTS AND STAKEHOLDERS FROM THE FOLLOWING ORGANIZATIONS:**

Type	Detail
Private firms and consulting companies	Macroview
	Medanito
	NXTP Labs
	Poliarquía
	Vicentin
Members of Congress and other politicians	Coalición Cívica
	GEN
	PJ
	PRO
	UCR
Public authorities	Federal government
	Autonomous City of Buenos Aires
	Province of Buenos Aires
	Province of Córdoba
	Province of Salta
	Province of Santa Fe





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