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INDONESIA ECONOMIC QUARTERLY

Enhancing preparedness, ensuring resilience

December 2011

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Investing in Indonesia's Institutions

for Inclusive and Sustainable Development

Preface

The Indonesia Economic Quarterly reports on and synthesizes the past three months' key developments in Indonesia's economy. It places them in a longer-term and global context, and assesses the implications of these developments and other changes in policy for the outlook for Indonesia's economic and social welfare. Its coverage ranges from the macroeconomy to financial markets to indicators of human welfare and development. It is intended for a wide audience, including policy makers, business leaders, financial market participants, and the community of analysts and professionals engaged in Indonesia's evolving economy.

This Indonesia Economic Quarterly was prepared and compiled by the macroeconomic analysis team at the World Bank's Jakarta office, under the guidance of Lead Economist Shubham Chaudhuri and Senior Country Economist Enrique Blanco Armas: Magda Adriani (commodity prices), Andrew Blackman (international environment, external sector and risks), Andrew Carter (fiscal revenues), Fitria Fitrani (external sector, labor and manufacturing), Faya Hayati (prices), Ahya Ihsan (fiscal expenditures and 2012 Budget), David Stephan (national accounts and executive summary) and Ashley Taylor. Additional contributions were received from Neni Lestari (banking), Mitchell Wiener and Iene Muliati (BJPS Law), Dwi Endah Abriningrum (2012 Budget), Sjamsu Rahardja, Deborah Winkler, Lili Yan Ing, and Gonzalo Varela (manufacturing) and Pedro Cerdan-Infantes (R&D). Arsianti, Enrique Blanco Armas and Ashley Taylor shared the editing and production with assistance from Yue Man Lee and Elaine Tinsley. Jonas Arp Fallov, Hari Purnomo and Djauhari Sitorus provided detailed comments and input. Farhana Asnap, Indra Imawan, Jerry Kurniawan, Nugroho, Marcellinus Winata and Randy Salim organized the dissemination and Titi Ananto, Sylvia Njotomihardjo and Nina Herawati provided valuable administrative support.

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ABBREVIATIONS AND ACRONYMS

APBN	<i>Anggaran Pendapatan dan Belanja Negara</i> (State Budget)	MGs	Matching Grants
APEC	Asia-Pacific Economic Cooperation	mKL	Million Kilolitre
ASABRI	<i>Asuransi Angkatan Bersenjata Republik Indonesia</i> (Pre and Post Retirement Life Insurance Program for Military)	MoF	Ministry of Finance
ASEAN	The Association of Southeast Asian Nations	MP3EI	<i>Master Plan Percepatan dan Perluasan Pembangunan Ekonomi Indonesia</i> (Master Plan for the Acceleration and Expansion of Indonesia's Economic Development of Indonesia)
ASKES	<i>Asuransi Kesehatan</i> (National Health Insurance)	MSME	Micro, Small and Medium-sized Enterprises
BI	Bank Indonesia	MTEF	Medium-Term Expenditure Framework
BKPM	<i>Badan Koordinasi Penanaman Modal</i> (Indonesia Investment Coordinating Board)	MTP	Major Trading Partner
BOS	<i>Bantuan Operasional Sekolah</i> (School Operational Assistance)	OECD	Organization for Economic Co-operation and Development
BPD	Barrels per day	OJK	<i>Otoritas Jasa Keuangan</i> (Financial Service Authority)
BPJS	<i>Badan Penyelenggara Jaminan Sosial</i> (Social Security Administrative Bodies)	PBB	Performance-Based Budgeting
BPS	<i>Badan Pusat Statistik</i> (Central Bureau of Statistics)	PKH	<i>Program Keluarga Harapan</i> (Conditional Cash Transfer Program)
BUMN	<i>Badan Usaha Milik Negara</i> (State-owned Enterprises)	PNPM	<i>Program Nasional Pemberdayaan Masyarakat</i> (National Program for Community Empowerment)
CPI	Consumer Price Index	R&D	Research and Development
CRGs	Competitive Research Grants	RASKIN	<i>Beras untuk Rakyat Miskin</i> (Rice for the Poor)
DAU	<i>Dana Alokasi Umum</i> (General Allocation Fund)	RHS	Right Hand Side
DJSN	<i>Dewan Jaminan Sosial Nasional</i> (National Social Security Council)	RISTEK	<i>Riset dan Teknologi</i> (Research and Technology)
DPR	<i>Dewan Perwakilan Rakyat</i> (House of Representatives)	RPJM	<i>Rencana Pembangunan Jangka Menengah</i> (Medium-term Development Strategy)
DRN	<i>Dewan Riset Nasional</i> (National Research Council)	SAL	<i>Sisa Anggaran Lebih</i> (Unspent Fiscal Balance)
EME	Emerging Market Economies	Satker	<i>Satuan Kerja</i> (Working Unit)
EU	European Union	SBI	<i>Sertifikat Bank Indonesia</i> (Bank of Indonesia certificate)
FDI	Foreign Direct Investment	SBN	<i>Surat Berharga Negara</i> (Government Marketable Securities)
GDP	Gross Domestic Product	SJSN	<i>Sistem Jaminan Sosial Nasional</i> (National Social Security System)
Gol	Government of Indonesia	SOE	State-owned Enterprise
ICP	Indonesian's Crude Oil Price	STI	Science, Technology and Innovation
IDR	Indonesian Rupiah	SUNs	<i>Surat Utang Negara</i> (Local Currency Government Securities)
IEQ	Indonesia Economic Quarterly	TASPEN	<i>Tabungan Asuransi Pegawai Negeri</i> (Pre and Post Retirement and Life Insurance Program for Civil Servants)
IMF	International Monetary Fund	TCF	Textiles, Clothing and Footwear
Jamkesda	<i>Jaminan Kesehatan Daerah</i> (Regional Health Insurance)	TFP	Total Factor Productivity
Jamkesmas	<i>Jaminan Kesehatan Masyarakat</i> (Health Insurance Reform Scheme)	UK	United Kingdom
Jamsostek	<i>Jaminan Sosial Tenaga Kerja</i> (Private Sector Social Security System)	UNESCO	United Nations Educational, Scientific and Cultural Organization
JHT	<i>Jaminan Hari Tua</i> (Jamsostek Old-Age Program)	US	United States
KIN	<i>Komisi Inovasi Nasional</i> (the National Innovation Commission)	USD	United States Dollar
LHS	Left Hand Side	UU	<i>Undang Undang</i> (National Laws)
LIPI	<i>Lembaga Ilmu Pengetahuan Indonesia</i> (Indonesia Institute of Science)	VAT	Value Added Tax
LKPP	<i>Laporan Keuangan Pemerintah Pusat</i> (Central Government Financial Report)	WB	World Bank
LPNK	<i>Lembaga Pemerintah Non Kementerian</i> (Non-Ministerial Government Agency)	yoy	Year-on-year

Executive Summary: Enhancing preparedness, ensuring resilience

The global economy remains in turbulent times, clouding the outlook for the Indonesian economy

International financial markets remain turbulent, dominated by the political and economic challenges of the Euro zone debt crisis and signs of weakening global growth. However, to date, although portfolio outflows have been seen, Indonesia's domestic economy continues to perform strongly. The economy remains relatively well-positioned to weather future external shocks and steps have been taken to improve crisis preparedness, for example, by increasing the flexibility of any fiscal response.

The Euro zone continues to grapple with the policy responses to stem the crisis...

The political and policy responses to the Euro zone debt crisis have been evolving on an almost daily basis, influencing global financial markets, risk appetite and capital flows to emerging economies such as Indonesia. Increased funding stress for European financial institutions was followed by a coordinated announcement of liquidity swap arrangements by central banks including the Federal Reserve and European Central Bank.

...and further signs of weakening global activity have appeared, depressing commodity prices

Business confidence and high frequency indicators point to a further weakening in activity in the Euro zone, with output expected to contract in the next two quarters. Fiscal adjustments will likely drag on medium-term growth, highlighting the importance of progress on much-needed structural reforms. While recent economic performance in the US has surprised slightly on the upside, there are signs of weakening activity in developing Asia. Industrial output growth has come down, both due to regional factors, such as the impact of the Thai floods, and weakening global demand. International commodity prices have declined further, with non-energy commodity prices down just over 10 percent between September and November.

Nevertheless, Indonesia's real economy continued to perform strongly in the third quarter...

Indonesia's growth performance in Q3 2011 showed few signs of being impacted by the uncertain international economic outlook. Real GDP increased by 6.5 percent year-on-year for the third consecutive quarter, although quarterly growth dropped slightly on a seasonally adjusted basis to 1.3 percent. Private consumption growth remained strong as did real export growth, albeit slightly down on Q2. On the production-side, manufacturing continues to perform strongly. Recent GDP growth has been accompanied by robust job creation, with non-agricultural employment up 5.4 percent in the year to August 2011, although agricultural employment fell.

...with a baseline growth projection for 2012 of 6.2 percent

Domestic forward-looking indicators appear supportive, with consumer sentiment buoyed by inflation coming down to its lowest level in one and a half years. However, reflecting weaker than expected outcomes and continued global uncertainty, projected growth of Indonesia's major trading partners in 2012 has been downgraded to 3.5 percent from 3.9 percent in the October 2011 *IEQ*. As a result, the World Bank's baseline 2012 growth forecast for Indonesia is being lowered to 6.2 percent, marginally down on 6.3 percent in the October *IEQ*. The growth forecast for 2011 remains unchanged at 6.4 percent.

Table 1: Growth of 6.2 percent is projected for 2012

		2009	2010	2011	2012
Gross domestic product	(Annual percent change)	4.6	6.1	6.4	6.2
Consumer price index*	(Annual percent change)	2.6	6.3	4.1	5.6
Budget balance**	(Percent of GDP)	-1.6	-0.6	-2.1	-1.5
Major trading partner growth	(Annual percent change)	-1.4	6.8	3.3	3.5

Note: * Q4 on Q4 inflation rate. ** 2011 figure is approved revised Budget and 2012 is the Government's Budget

Source: Ministry of Finance, BPS via CEIC, Consensus Forecasts Inc., and World Bank

Significant downside risks to the international outlook remain...

While the baseline scenario for the near-term international outlook remains one of weaker growth in high income economies, moderating commodity prices and continued financial market turbulence, there is the risk of a deterioration to more adverse, but less probable, scenarios, as outlined in the October 2011 *IEQ*. In the event of these two scenarios - a major freezing up of international financial markets or even a severe, prolonged downturn, encompassing the major emerging economies - the external shocks hitting Indonesia through the trade and commodity and financial channels would be more severe, leading to

growth below the baseline projection. There is also a scenario in which uncertainty over the Euro zone is resolved quicker than expected, which could prompt the more rapid return of strong capital inflows to emerging markets, and the challenges that these bring.

...which could prompt further adverse external shocks to portfolio flows, and to commodity prices and demand

Following record inflows in previous quarters, Indonesia's financial account moved sharply into deficit in Q3 2011 as portfolio capital flowed out as global risk aversion moved higher. Reserves also fell markedly over September but more gradual declines were seen over October and November, as non-resident investor portfolio outflows moderated and the Rupiah depreciated against the US dollar. However, reserves remain sizeable and cover 2.3 times short-term external debt by remaining maturity. Other early signs of spillovers from the slowing global economy and falling commodity prices, were seen in recent declines in monthly export values, and a narrowing of the trade surplus.

FDI inflows also declined but remained relatively strong and, with the current account almost in balance, have an important role to play in covering Indonesia's external financing needs. Private external loan disbursements and roll-over rates held up but any further tightening of global US dollar funding could have important repercussions, for example, for any banks with limited foreign currency liquidity and for the broader availability of corporate external financing, including trade credit.

However, Indonesia is well-placed to weather such shocks and measures have been taken to enhance crisis preparedness

Notwithstanding the sizeable costs of energy subsidies, Indonesia's fiscal deficit remains restrained, with the 2012 Budget deficit of 1.5 percent of GDP down slightly on the likely 2011 outcome. Importantly, the Budget sets out a number of measures to deal with any future crisis situations should they arise, for example, a bond stabilization framework and mechanisms to adjust spending and financing as needed. Although no fiscal stimulus package has been announced, and may not be needed in the baseline scenario of still-robust growth, advance planning can be helpful, given ongoing disbursement problems. Gross fiscal financing needs for 2012 are sizeable but the Government has some buffer from its accumulated cash balances in the event of temporary financing difficulties.

Motivated by the weakening global environment, as well as lower domestic inflation, Bank Indonesia cut rates by 75 basis points over October and November. With high domestic liquidity the real impact of these relatively early cuts alone may be muted, but at the same time it will be important that the monetary policy stance keeps inflationary expectations anchored and responds to any future higher inflationary pressures. Loan growth continues to be strong and the banking sector in aggregate is in a sound condition. In an important regulatory development, the long-awaited Financial Services Authority Bill was passed. In light of ongoing market uncertainty, it will be important to manage any transition risks carefully and also to move forward with putting in place a financial sector safety net law so that any future financial institutions problems can be promptly and appropriately resolved.

Continued progress on investment climate reforms and investments in infrastructure can help to relax the constraints on businesses, improve the environment for innovation and enhance the medium-term growth outlook...

In addition to putting in place policies to address the near-term impacts of any future shocks, with a protracted weakness in external demand likely, it is an opportune time to move forward with investments and reforms which can enhance domestic productivity and growth and attract more stable and longer-term capital flows. Indeed, the 2012 Budget again significantly boosts capital expenditure, although ongoing budget execution challenges could hinder the effectiveness of the increased allocation on infrastructure

Improved infrastructure and investment climate can help to promote further the positive recent performance of Indonesia's manufacturing sector, after its weakness in the decade following the Asian crisis. The scope for productivity growth within manufacturing and other sectors through technology adoption and adaption can also be enhanced by further improvements in the quality of education of the labor force and the institutional environment for research and development.

...and also promote quality job creation to share more broadly the benefits of Indonesia's future growth

Measures to support the future growth of the manufacturing sector and related services sectors can play an important role in promoting quality job creation, i.e. jobs with higher productivity and wages, and in absorbing the roughly two million Indonesians entering the labor force each year. Related to the moves towards more inclusive growth, the recent enactment of the BPJS Law on social security administrators is an important stage in moving towards a new, comprehensive social security system for all Indonesians, although much work remains to be done on the implementation.

A. ECONOMIC AND FISCAL UPDATE

1. Turbulent times continue for the global economy and financial markets...

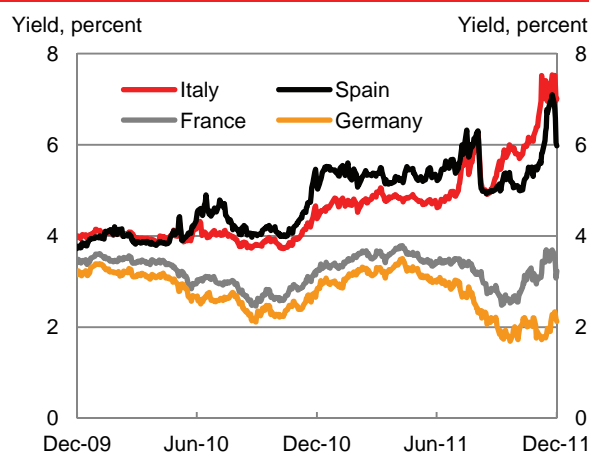
International financial and economic developments remain turbulent...

Developments in Indonesia's external environment continue to be dominated by the impact of the Euro zone debt crisis and potential further weakening in global economic activity. International financial markets remain highly sensitive to political developments in the Euro area, and in the US, and to high frequency data releases across the major global economies. This ongoing turbulence is consistent with the baseline near-term scenario outlined in the October 2011 *IEQ*.

...dominated by the political and economic challenges of the Euro zone debt crisis...

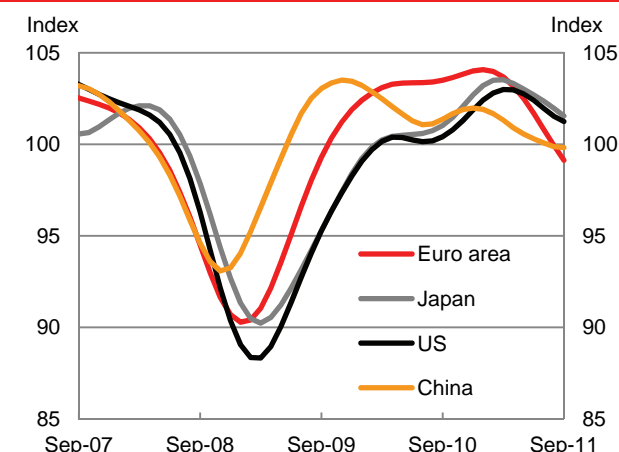
Concerns over fiscal financing needs or medium-term debt sustainability have increasingly spread to core Euro zone countries (Figure 1). Bond yields in Italy and Spain moved even higher and also increased for other countries, such as France, in part due to their potential burden in supporting other members. The political and policy responses to the debt crisis have been evolving on an almost daily basis, reacting to, and influencing, market developments. Debates continue over the policies and institutions that will play a role in addressing the crisis. As of early December the proposed policy response had moved on to a possible closer "fiscal union" for the Euro zone, including fiscal deficit rules, to make credible the much-needed fiscal adjustments. However, at the same time as dealing with the near-term crisis, countries face the challenge of making progress on much-needed structural reforms so as to promote growth, which could help offset the contractionary impact of fiscal tightening.

Figure 1: Financing costs for core Euro zone countries rose sharply over the past quarter
(10-year government bond yield, percent)



Source: JP Morgan

Figure 2: High frequency indicators point to a weakening in global activity
(OECD composite leading indicator index, 100=long-term trend of activity)



Note: Amplitude adjusted index (aims to have a lead time of 6-9 months on the reference industrial production series)
Source: OECD

...and the potential for further weakening in the global growth outlook...

Business confidence and high frequency leading indicators point to a further weakening in activity in the Euro area (Figure 2). Euro zone growth was 0.8 percent in Q3 2011 at a seasonally-adjusted annualized rate and, on a similar basis, the latest OECD forecasts (released end-November) project contractions of 1 percent and 0.4 percent in Q4 2011 and Q1 2012 respectively. Recent US economic performance has surprised slightly on the upside, although the political debate over fiscal consolidation will continue to play on the outlook. GDP growth in the US rose to 2 percent on a seasonally-adjusted annualized rate in Q3 from 1.3 percent in Q2. Unemployment also dropped significantly in November.

...including in the East Asia region

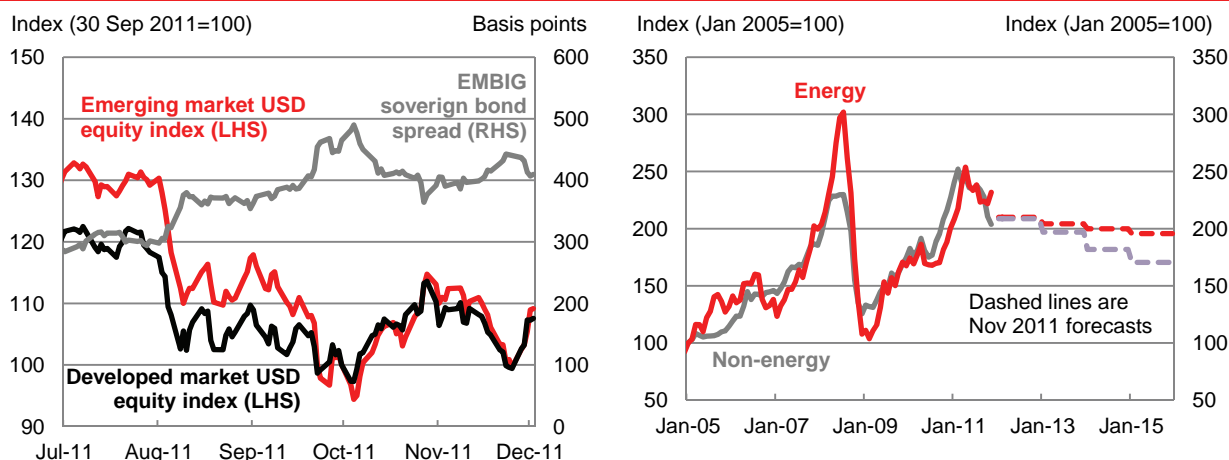
Developing economies in Asia saw some dampening in growth outcomes in Q3 2011, with seasonally-adjusted growth dipping in Korea and Philippines, for example, and India's growth also moving down. Regional factors, such as the Thai floods, have played a role, in addition to developments in the EU and US. Higher frequency indicators point to slowing momentum across the region, with industrial output growth declining, as the weaker global outlook weighs on production and investment decisions. Looking forward, the World Bank's recent East Asia and Pacific Update projects growth in developing East Asia, including China, to moderate to 7.8 percent in 2012 from 8.2 percent in 2011.¹

Financial markets have shown marked swings as the degree of optimism over international policy responses has changed

The past quarter has seen considerable swings in the direction of international equity market movements with the ebb and flow of economic and political news (Figure 3). Overall, developed economy equities (in US dollar) rose by 7.6 percent from 30 September to 2 December (although are down 7.0 percent on end-2010). Gains for emerging market equities were slightly higher, at 9.1 percent since end-September, but the falls since end-2010 are greater, at 16 percent. Emerging market bond spreads have fallen by 55 basis points since end-September, following a rise of over 180 basis points since early July.

International financial institutions have been buffeted by the market turbulence, for example, as seen in the failure of the broker MF Global. US dollar funding has also become more stressed, particularly for European financial institutions, and by some measures reached levels last seen at end-2008, but also in Japan. However, in late November, in a signal of the potential seriousness of these stresses, the central banks of Canada, the UK, Japan, the Euro zone, the US and Switzerland announced a coordinated lowering in the cost of existing US dollar liquidity swap arrangements and the establishment, as a contingency measure, of temporary bilateral liquidity swap arrangements. Markets were buoyed by this announcement, and at a similar time, China also lowered its reserve requirements.

Figure 3: International equity markets have followed a rollercoaster ride in recent months
Figure 4: Non-energy commodity prices have fallen further and are projected to decline gradually
(USD equity index, 30 September 2011=100; EMBIG (nominal USD commodity price index, January 2005=100) sovereign bond spread, basis points)



Note: Equities are MSCI indices. EMBIG is JP Morgan Source: World Bank Development Prospects Group
 Emerging Market Bond Index Global
 Sources: MSCI, JP Morgan, Chicago Board Options
 Exchange and World Bank staff calculations

¹ World Bank (2011), *East Asia and Pacific Economic Update - Navigating Turbulence, Sustaining Growth*, <http://go.worldbank.org/0B8QITE7U0>

Non-energy commodity prices have fallen further as the outlook for industrial production has been downgraded

Non-energy international commodity prices have continued to fall, dropping by 10.6 percent in US dollar terms from September to November 2011 (and falling by almost 20 percent from their recent peak in February 2011). With the outlook for industrial production weakening, metals and minerals in particular along with raw materials saw price declines and as of November were down 24.9 percent and 32.2 percent from their 2011 highs. Iron ore prices contracted by almost a quarter from September (apparently partly explained by changes in contractual arrangements) with copper prices also falling. Energy prices recovered in November, up by 4.5 percent, but remain 8.7 percent below their April 2011 recent high. Baseline projections are for the gradual downward adjustment in commodity prices to continue, but for prices to remain at relatively high levels (Figure 4).

These developments in international financial markets, commodity prices and external demand will be key drivers of Indonesia's economic outlook

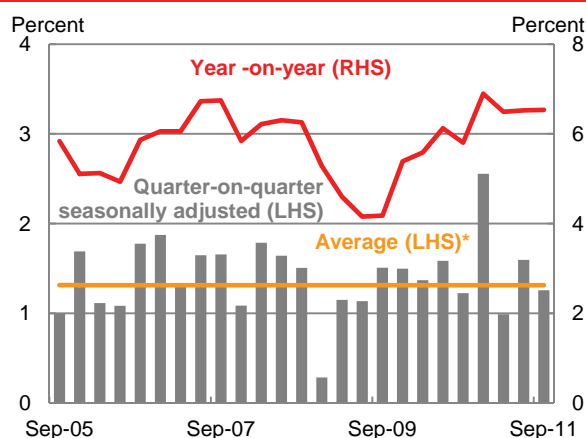
As highlighted in the October 2011 *IEQ*, the evolution of the Euro zone debt crisis and the weakening of the global outlook are likely to feed through to Indonesia's economic and fiscal position through a number of transmission mechanisms, including trade flows and commodity prices and financial flows from banks and portfolio investors. The following sections look across recent economic and financial developments in Indonesia, highlighting the potential early signs of such spillovers.

2. ...but Indonesia's growth remained stable and robust in the third quarter

GDP growth remained steady in the third quarter of 2011 at 6.5 percent...

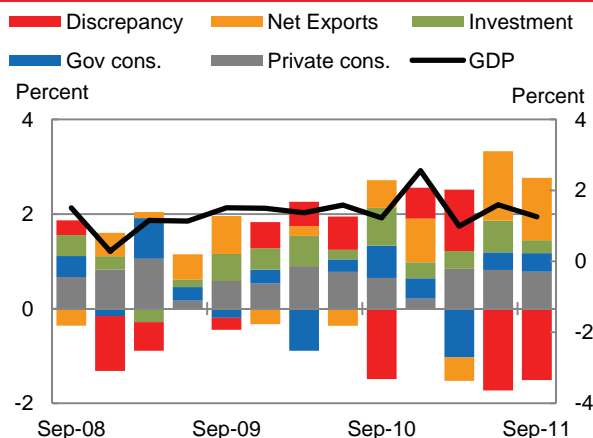
Indonesia's economic growth was steady in Q3 2011, showing few signs of being impacted by the uncertain international economic outlook (Figure 5). Real GDP growth was 6.5 percent year-on-year for the third consecutive quarter. On a seasonally adjusted basis, quarterly growth eased to 1.3 percent, slightly lower than the 1.6 percent recorded in Q2. The growth outcome for the third quarter was marginally below consensus forecasts but in line with the October *IEQ* forecast. In light of this, the World Bank growth forecast for 2011 is unchanged at 6.4 percent. However, recent growth outcomes in Indonesia's major trading partners (MTP), coupled with the continued uncertainty in Europe, have resulted in a slight downgrade in Indonesia's 2012 growth to 6.2 percent. This projection is just above November's mean Consensus forecast of 6.1 percent, which has moved down from 6.4 percent three months earlier.

Figure 5: GDP growth remained at 6.5 percent in Q3 2011...
(growth in real GDP, percent)



Note: * Average QoQ growth since Q3 2001
Source: BPS and World Bank staff seasonal adjustment

Figure 6: ... driven by net exports and private consumption
(contribution to quarter-on-quarter seasonally adjusted real GDP growth, percent)



Note: Contributions may not sum to overall GDP growth due to seasonal adjustment of each individual series
Source: BPS and World Bank staff calculations

...supported by private consumption and exports

Private consumption continued to grow strongly in Q3, increasing by 1.4 percent in seasonally-adjusted terms (Figure 6). Consumption growth continues to be supported by low inflation and high levels of consumer confidence. Export growth remained robust in Q3, at 2.4 percent, down from the previous quarter's very strong 4.9 percent growth. In contrast, real imports fell slightly and, as a result, net exports provided the strongest contribution to growth, following a similarly strong performance in Q2. Real investment growth moderated, growing by 1.1 percent, with the weakening driven by foreign machinery and equipment and building investment.

Manufacturing growth remained strong, with non-oil and gas production increasing by around 7 percent

On the production side, the strength of domestic demand continues to support growth in trade, hotels, and restaurants and transport and communications. The strong performance of the manufacturing sector continues (see Part C), with non-oil and gas manufacturing growth moving up to 7.0 percent for the first time since early 2005. This was helped by the rebound in transport equipment and machinery production from supply disruptions related to Japan's earthquake and tsunami. Overall, non-tradable sector growth picked up slightly in Q3 to 8.5 percent year-on-year while tradable sectors growth fell slightly to 4.4 percent.

Domestic partial indicators remain strong, with few clear signals, to date, of the real impact of the deteriorating external environment

Partial indicators continue to point towards strong domestic demand, with few clear signs, to date, of the impact of the deteriorating international outlook on Indonesia's domestic economy. Confidence measures remain strong. Although respondents to Bank Indonesia's recent quarterly business survey indicated they expected activity to slow in Q4 2011, other indicators have picked up. Investment growth is expected to regain momentum, with recent strong growth in capital goods imports, cement sales, and industrial production. Given the slow rate of government disbursements, especially capital and materials, there is some upside to quarterly investment growth in Q4 2011.

Table 2: After a further downward revision to the external outlook, GDP growth is projected at 6.2 percent in 2012
(percentage change, unless otherwise indicated)

	Annual			Year to December quarter			Revision to Annual	
	2010	2011	2012	2010	2011	2012	2011	2012
1. Main economic indicators								
Total Consumption expenditure	4.0	4.8	5.4	4.9	5.7	5.1	-0.3	0.0
Private consumption expenditure	4.6	4.9	4.7	4.4	5.5	4.6	0.0	0.0
Government consumption	0.3	4.5	10.1	7.3	6.9	7.5	-2.1	0.0
Gross fixed capital formation	8.5	8.7	9.6	8.7	10.9	7.5	-0.5	0.3
Exports of goods and services	14.9	14.1	7.9	16.1	8.7	7.3	0.0	-0.9
Imports of goods and services	17.3	12.9	9.7	16.9	8.5	8.6	-2.4	-0.3
Gross Domestic Product	6.1	6.4	6.2	6.9	6.1	6.0	0.0	-0.1
Agriculture	2.9	3.3	3.8	3.8	3.1	3.9	-0.1	0.0
Industry	4.7	5.2	4.8	5.3	5.3	4.2	0.1	-0.2
Services	8.4	8.6	8.0	9.2	8.2	8.2	0.0	0.0
2. External indicators								
Balance of payments (USD bn)	30.3	16.5	11.8	n/a	n/a	n/a	-7.4	-7.0
Current account balance (USD bn)	5.6	3.1	-1.7	n/a	n/a	n/a	0.8	-2.0
Trade balance (USD bn)	21.3	24.8	17.9	n/a	n/a	n/a	3.1	-1.8
Financial account balance (USD bn)	26.2	15.9	13.5	n/a	n/a	n/a	-7.4	-5.0
3. Other economic measures								
Consumer price index	5.1	5.4	4.9	6.3	4.1	5.6	-0.3	-0.6
Poverty basket Index	8.4	8.1	6.7	11.1	5.9	6.6	0.0	0.0
GDP Deflator	8.0	8.4	8.6	8.0	8.5	8.8	0.1	-0.4
Nominal GDP	14.6	15.3	15.3	15	15.2	15.4	0.1	-0.5
4. Economic assumptions								
Exchange rate (IDR/USD)	9074	8742	8800	8977	8900	8800	80.1	150.0
BI Policy Rate	6.4	6.6	6.0	6.5	6.0	6.0	-0.2	-0.8
Indonesian crude price (USD/bl)	79.4	111	110	86.2	110	110	6.2	10.0
Major trading partner growth	6.8	3.3	3.5	5.6	3.6	4.0	0.0	-0.4

Note: Projected trade flows relate to the national accounts, which may overstate the true movement in trade volumes and understate the movement in prices due to differences in price series

Source: MoF, BPS, BI, CEIC and World Bank staff projections

Indonesia is projected to maintain growth of 6.4 percent in 2011 and a solid 6.2 percent in 2012

However, the outlook for 2012 remains clouded by uncertainties in Europe. While Indonesia's low trade share to GDP will shield it somewhat, recent GDP outcomes in the region, along with the declines in commodity prices, suggest that it will not be immune to spillovers via trade channels. The forecast for growth in Indonesia's major trading partner (MTP) economies has been downgraded further from the October *IEQ* to 3.5 percent in 2012 (Table 2).

This lower MTP growth has contributed to a lowering in the World Bank's baseline 2012 growth projection for Indonesia to 6.2 percent, marginally lower than the October *IEQ* forecast of 6.3 percent. Reflecting the downward revision to external demand, export growth has been lowered by almost one percentage point and the forecast for industrial sectors such as manufacturing have moved down slightly.

3. Balance of payment outflows were seen in the third quarter of 2011

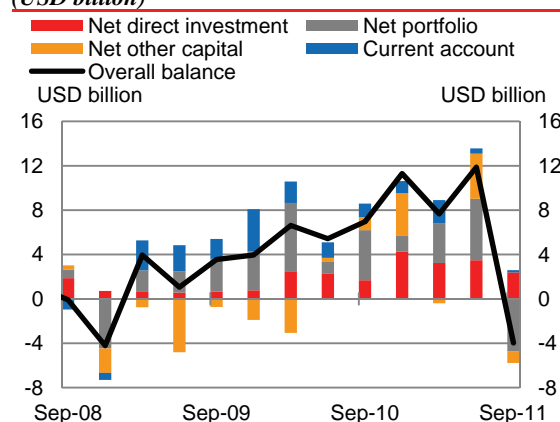
Indonesia's overall balance of payment flows reversed sharply in Q3 2011, moving from record inflows to outflows

Portfolio capital outflows over August and September contributed to an overall balance of payments deficit of USD 4.0 billion in the third quarter of 2011. This was the first quarterly deficit since the height of the post-Lehman financial crisis in the fourth quarter of 2008. The deficit was driven by a sharp reversal in portfolio financial account flows as foreign investors sold down their shares and government bonds in the wake of heightened uncertainty surrounding the Euro zone debt crisis.

Portfolio outflows were the primary driver of the financial account deficit although FDI inflows also dropped off and net other investments outflows were seen

Financial account outflows reached USD 3.4 billion in Q3 2011 (Figure 7). This compares with inflows of USD 13.1 billion in Q2 (and the outflows of USD 5.9 billion seen in Q4 2008). Portfolio investment recorded a net outflow of USD 4.7 billion (after inflows of USD 5.5 billion in Q2), driven almost entirely by reductions in holdings of SBIs and SUNs. Net direct investment also moderated as FDI inflows declined to USD 3.7 billion from USD 6.1 billion in Q2 (although this remains above the average quarterly inflows seen over the past two years). "Other investment" also reverted to a net outflow, as private sector deposits and other assets overseas rose. Private sector drawings of foreign loans (USD 6.8 billion) remained strong and, with repayments of USD 4.7 billion, the implied roll-over rate of 1.4 was similar to that in Q2.

Figure 7: Financial outflows moved the overall balance of payments into deficit in Q3 2011
(USD billion)



Note: Errors and omissions not shown
Source: BI

The current account continued to narrow in the third quarter of 2011

The trend decline in the current account surplus over 2011 continued. The surplus moved to USD 0.2 billion in Q3 (0.1 percent of GDP) from USD 0.5 billion in Q2 (0.2 percent of GDP). The surplus on goods trade (USD 9.6 billion) and current transfers (USD 1.0 billion) fully offset the deficit on services trade (USD 2.8 billion) and the income deficit (USD 7.6 billion). The goods surplus was broadly unchanged relative to Q2. The oil & gas trade balance returned to a small surplus, after recording a significant deficit in the preceding quarter, as the oil deficit was offset by the gas surplus. Other exports rose slightly as higher mining & minerals exports offset a fall in manufacturing exports. The value of goods imports also picked up moderately with rising capital and consumption goods offsetting a fall in intermediate imports. The services deficit narrowed while the income deficit continued to widen, due to increased profit repatriation by foreign-owned firms, and higher payment of portfolio investment income. Current transfers remained stable.

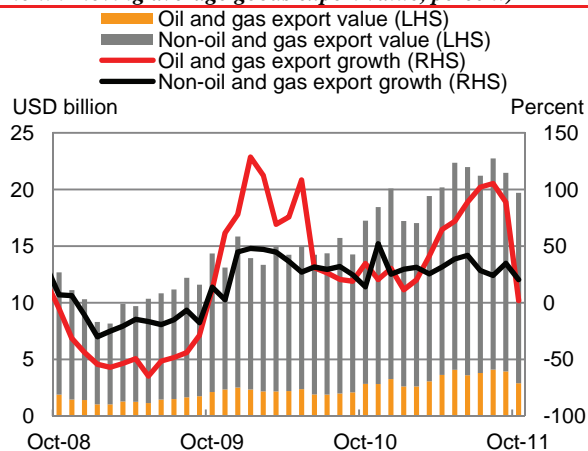
More recently, Indonesia's monthly export values show some signs of the spillovers from the slowing global economy

Reflecting slowing external demand and lower commodity prices, Indonesia's exports declined over the months of September and October (Figure 8). These monthly outcomes were primarily driven by lower oil & gas exports, due to lower prices and demand. Meanwhile, non-oil & gas export values remained relatively stable, as increasing exports of machinery and mechanical equipment offset falls for some bulk commodities. With imports increasingly gradually, the monthly goods trade surplus narrowed from USD 3.6 billion in August to USD 1.2 billion in October 2011.

Projections for the balance of payment financial inflows are highly sensitive to global market conditions

Further declines in commodity prices, downward revisions to external demand, and the potential for additional shocks to international risk aversion, all weigh on projections for balance of payments flows over the forecast horizon. A key sensitivity is the degree and duration of stress in global financial market conditions, particularly for US dollar liquidity to finance trade and investment. Under the baseline scenario FDI inflows are expected to remain solid in 2012 (Table 3). Foreign corporates continue to be attracted by Indonesia's growing domestic market, although FDI inflows will also likely depend considerably on conditions in source countries, and lower commodity prices and weaker external demand could influence resource-related investments. Portfolio inflows are expected to return in 2012, reversing recent outflows, but are likely to remain volatile in the near-term.

Figure 8: Export values have softened in recent months
(value of goods exports, USD billion; year-on-year growth of 3-month moving average goods export value, percent)



Source: BPS and World Bank staff calculations

Table 3: The current account is projected to move into a small deficit in 2012 and financial inflows to come down
(USD billion)

	2008	2009	2010	2011	2012
Overall Balance of Payments	-1.9	12.5	30.3	16.5	11.8
Current Account	0.1	10.6	5.6	3.1	-1.7
Trade	9.9	21.2	21.3	24.8	17.9
Income	-15.2	-15.1	-20.3	-26.0	-24.1
Transfers	5.4	4.6	4.6	4.1	4.4
Capital & Financial Accounts	-1.8	4.9	26.2	15.9	13.5
FDI	3.4	2.6	10.7	11.2	10.8
Portfolio	1.8	10.3	13.2	3.8	9.1
Other	-7.3	-8.1	2.2	1.5	-6.3
Reserves^(a)	51.6	66.1	96.2	111.3	

Note: Errors and omissions not shown. ^(a) 2011 reserves as of end-November

Source: BI and World Bank staff projections

Indonesia's current account is projected to move into a small deficit in 2012

The projection for the 2012 current account has been revised from a small surplus of USD 0.3 billion in the October IEQ to a small deficit of USD 1.7 billion (0.2 per cent of GDP). This reflects a lowering of the trade surplus due to weaker external demand and commodity prices combined with strong import growth, along with a continued income deficit consistent with increasing FDI flows to Indonesia and the repatriation of related corporate earnings.

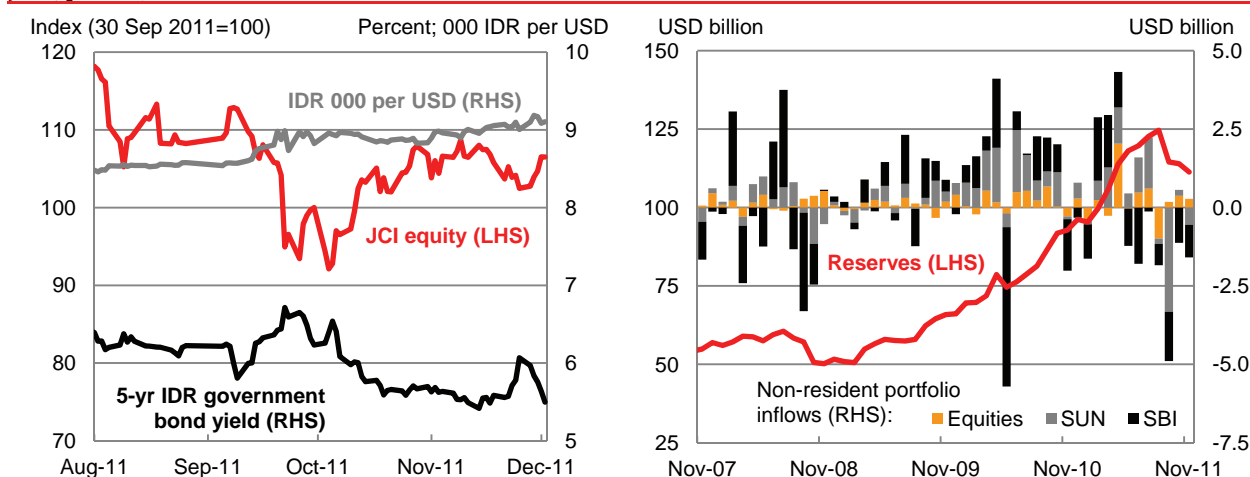
The projected movement of the annual current account into deficit in 2012, for the first time since the Asian financial crisis, and which is also forecast in the IMF's recent Article IV report, in part reflects the strength of demand for imports of capital and intermediate goods. Such imports are inputs to investment and production by domestic and foreign firms. Some of the demand for such imports may be associated with the rise in FDI inflows into Indonesia since mid-2009. These FDI flows also provide an increasing, more stable, share of total capital inflows to cover Indonesia's gross external financing needs. Estimated by the 2011 IMF Article IV to be 10.3 percent of GDP in 2012, these external financing needs include both the small current account deficit and external debt amortizations.

4. International financial market movements continue to spill over to Indonesia

Indonesian equity prices have continued to track the gyrations of international markets while the Rupiah has depreciated against the dollar

As in international markets, Indonesia's equities have experienced both periods of gains and losses over the past quarter. Overall, the Jakarta Composite Index rose by 6.5 percent from end-September to 2 December (Figure 9) but, with the declines of August and September offsetting gains earlier in the year, is up by only 2.1 percent since end-2010. The Rupiah has fallen in value gradually, with Bank Indonesia's intervening, and from end-September to 2 December depreciated by 3.1 percent to IDR 9,103 per USD (or by 1.4 percent since end-2010). Bank Indonesia purchases have also been a factor supporting local currency government bond prices. Five-year local currency government bond yields have narrowed by 73 basis points over the corresponding period, despite a pick-up in late-November.

Figure 9: Indonesian equity prices have experienced up and down swings while the Rupiah has depreciated gradually... continued, although at much lower levels than in September
(equity index, 30 September 2011=100; IDR per USD; (USD billion)
yield, percent)



Sources: CEIC and World Bank staff calculations

Note: "Flows" for SUN (IDR government securities) and SBI (BI certificates) indicate changes in holdings
Sources: BI, CEIC and World Bank staff calculations

Non-resident investors' portfolio outflows almost reached the highs of May 2010 in September but moderated in October and November

After reaching USD 4.7 billion in September, non-resident investors' portfolio outflows from Indonesia fell in October and November to USD 0.5 billion and USD 1.3 billion respectively. Reduced holdings of fixed income securities drove these outflows as net equity purchases by non-resident investors remained slightly positive. Non-resident investor holdings of Bank Indonesia certificates (SBIs) declined steadily and, while flat in October, holdings of local currency government securities (SUNs) fell further in November after the USD 3.3 billion decline in September. As a result, non-resident investors held 30 percent of tradable IDR government securities at end-November (down from a high of 39 percent in July 2011). Their share of SBI holdings of a declining overall stock of SBI has fallen to 16 percent from a high of 39 percent in May 2011.

Indonesia's reserves fell sharply in September but have since seen more modest declines

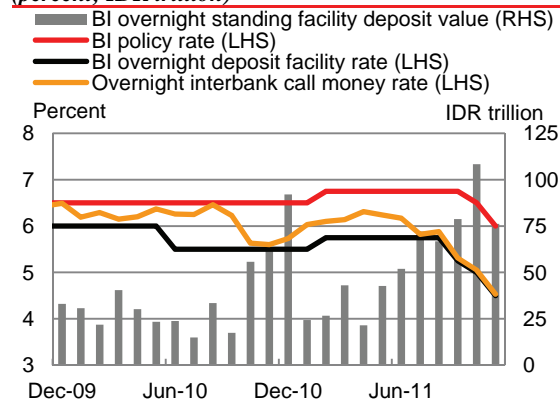
In September, with Bank Indonesia (BI) intervening heavily to support the Rupiah, foreign reserves fell by USD 10.1 billion, or 8 percent, to USD 114.5 billion. In comparison, reserves fell by USD 6.5 billion, or 11 percent, over October 2008 and dropped by USD 4.0 billion in May 2010 (a 5 percent fall). With portfolio outflows stabilizing, the decline in reserves was only USD 0.5 billion in October, followed by a further USD 2.6 billion fall in November to USD 111.3 billion. Reserves remain around 2.3 times the level of recorded short-term external debt by remaining maturity at end-September.

Bank Indonesia cut the monetary policy rate in both October and November in response to declining inflation and the deteriorating global outlook

Bank Indonesia (BI) cut its policy rate in both October and November (Figure 11). After a 25 basis point cut in October, one of the earliest policy responses in the region, the 50 basis point reduction in November to 6 percent was unexpected by markets. BI's policy statement pointed to decreasing inflation, a desire to limit potential negative spillovers to the Indonesian economy from worsening global economic prospects, along with the relative stability of domestic financial markets in October and a desire to narrow the interest rate term structure.

Figure 11: BI cut the policy rate in October and November

(percent; IDR trillion)



Source: BI and CEIC

Overnight rates have recently been tracking the lower bound of BI's operational corridor (the overnight deposit facility rate) which, since September is 150 basis points below the policy rate. The past couple of months have also seen an increase in the liquidity of banks placed in BI's overnight standing facility. As in earlier periods of international market turbulence it will be important to watch for any signs of heightened liquidity pressures in aggregate, or for individual banks, particularly for US dollar funds.

Lending growth rose gradually through end-September

Consistent with the robust third quarter GDP figures, loan growth remained robust through end-September, rising to 25.3 percent year-on-year from 23.0 percent at end-June. With inflation falling, ex post real loan growth picked up to 19.8 percent from 16.5 percent three months earlier. Working capital loans continue to be the major driver of growth (contributing 11.8 percentage points of this growth) followed by consumer loans and investment loans. By sector, year-on-year loan growth was highest to utilities, mining and business services. In terms of the cost of funds, average nominal lending rates remained stable at around 13 percent, moving up to 8.3 percent in ex post real terms with the decline in inflation.

Box 1: The passage of the OJK Law

After a long deliberation, the House of Representatives (DPR) finally passed the Financial Services Authority or OJK (*Otoritas Jasa Keuangan*) Law on 27 October 2011. The discussion process on the draft law had taken from August 2010 and its ratification has ended more than a decade of uncertainty regarding the establishment of the OJK, following two amendments of the Central Bank Law No 13/1968 in 1999 and 2004. The 1999 amendment, Law No 23/1999, stated that bank supervision will be conducted by an independent agency and the second amendment, Law No. 3/2004, mandated the establishment of such a body by end-2010.

The new OJK will regulate and supervise the banking sector, capital markets and non-bank financial institutions. The OJK will be led by a Board of Commissioners with nine commissioners, of which seven will be selected by the DPR, based on a list of names proposed by the President, and the remaining two are *ex-officio* members from the Ministry of Finance and Bank Indonesia. The Board must be established seven months after the OJK Law ratification and two months after that, a transition team must be formed. The OJK will take over the current supervision functions of capital markets and non-bank financial institutions from Bapepam-LK (part of the Ministry of Finance) from end-2012. This will be followed by the transfer of Bank Indonesia's responsibilities for the supervision and regulation of banks at the end of 2013. In addition to setting up the new OJK the Law established a Financial System Coordination Forum consisting of the Minister of Finance, the Governor Bank Indonesia, the Chair of the OJK Board and the Chair of the Deposit Insurance Corporation.

The ratification of the OJK Law brings to an end the uncertainty over the new supervisory authority and provides an opportunity for improved coordination in supervision across the financial sector. However, as emphasized in the review of Indonesia's financial system conducted by the World Bank and the IMF (see IMF, 2011), it must be noted that, as in other countries, there are risks associated with such movements in supervisory functions. This is particularly the case during the transition period, which is relatively short. There are risks that in the move to the new institution, for example, some supervisory competencies or continuity could be lost. There is therefore a need to strengthen further the existing regulatory and supervisory framework (with cross-country experience indicating that changing structure alone does not improve supervision). As seen in many countries during the global financial crisis of the last few years, it will also be important to ensure that there is close coordination between the new authority, which has the responsibility for micro-prudential oversight, with BI's macro-prudential supervision functions. Furthermore, in light of the ongoing uncertainty in international financial markets, it will be important to move forward with putting in place a financial sector safety net law that provides the relevant Indonesian authorities with an appropriate legal mandate and framework to deal with financial institutions under stress.

Note: For an overview of the IMF and World Bank assessment of Indonesia's financial sector see IMF (2010), Indonesia: Financial System Stability Assessment, <http://www.imf.org/external/pubs/ft/scr/2010/cr10288.pdf>

**System-wide banking
sector indicators
continue to be sound...**

System-wide banking sector indicators continue to show a sound and stable performance. At end-September the aggregate return on assets was 3.1 percent, the non-performing loan ratio was 2.7 percent and the capital adequacy ratio 16.7 percent. With loan growth exceeding the 18.7 percent year-on-year growth of deposits, the aggregate loan-to-deposit ratio has moved up, reaching 82 percent at end-September, up from 76 percent at end-January 2011.

**...and Parliament has
approved the long-
awaited Financial
Supervisory Authority
Law**

In a major development for the future regulatory structure of Indonesia's financial sector, Parliament passed a Law which establishes a Financial Services Authority with responsibilities for banks, non-bank financial institutions and capital markets (Box 1). In another regulatory development, Bank Indonesia indicated that it plans to issue new regulations on credit card accounts including, for example, regulating the maximum interest rate and limiting the number of cards for those with a salary below a certain level, with the aim of introducing greater discipline in the marketing and issuing of cards.

5. Headline inflation continued to ease**Headline inflation has
moved down further,
reaching a 19-month low
of 4.2 percent in
November 2011**

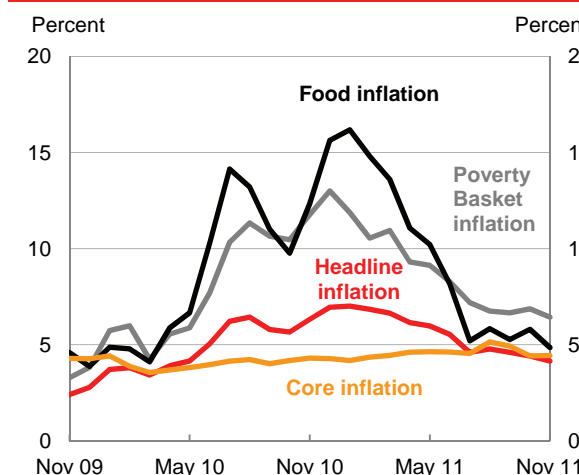
Over the past quarter headline CPI inflation has continued to move down from its recent peak in January 2011. At 4.2 percent year-on-year in November 2011 it had declined to its lowest rate in one and a half years (Figure 12). The easing in inflation was supported by this year's lower than usual price increases associated with Ramadan and Idul Fitri.

Inflation across the components of the CPI was mixed. After halving during the harvest season to around 5 percent, food price inflation has remained steady at those levels in recent months. Strong growth in rice prices has been offset by the unwinding of the massive spike in spice prices last year. The poverty basket inflation rate decreased from 6.8 percent in August to 6.4 percent in November.

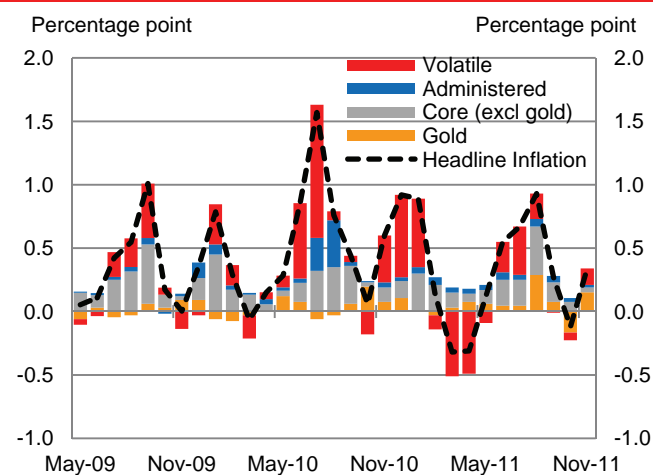
Looking across the other components of the CPI, education fees, which are typically increased in the third quarter of each year, have increased by 7 percent since July which was the largest since 2007. Meanwhile, inflation of clothes prices have come down since their highs in August as retreating gold prices drove down the rate of price inflation for personal effects, a subcomponent of clothing. The absence of any reforms to the price of subsidized energy this year has seen transport and household energy costs increasing well below headline inflation at 2.0 percent and 3.4 percent respectively in November.

**Domestic and
international rice prices
continue to rise into 2012**

Domestic prices of rice continued to increase over the quarter with low-quality retail rice reaching a record IDR 7,977 per kg in November, an increase of 5.1 percent since August, and 13.3 percent over the year. According to BPS estimates, domestic rice production in 2011 is expected to fall to 66 million MT of paddy (approximately 37 million MT of rice), slightly below 2010 levels due to delays in planting from poor weather and pestilence. For 2012, the government has estimated that rice production could reach 74 million MT of paddy (equivalent to roughly 40 million MT of rice), an increase of 12 percent over the 2011 estimate. On international markets, average international rice prices (for Vietnamese 25 percent broken rice) over September to November were up 10 percent on the preceding three months and 19 percent over the year. The impact of the floods in Thailand on international markets is likely to be temporary, with Thai rice production estimated to be back to normal in 2012 and India also returning to export markets.

Figure 12: Headline inflation has continued to move down over the past quarter ...*(year-on-year growth)*

Source: BPS and World Bank staff calculations

Figure 13: ...with monthly core inflation declining in recent months*(percentage point contribution to monthly inflation)*

Source: BPS and World Bank staff calculations

Core inflation, which rose sharply in August to 5.1 percent, has unwound on the back of falling gold prices to move down to 4.4 percent in November

Core inflation, which reached a two and a half year high of 5.1 percent year-on-year in August, had eased to 4.4 percent by November. The slow-down was driven by the unwinding of prices post-Ramadan as well as the retreat in gold prices (Figure 13). With gold inflation influenced by international price movements, which in turn are subject to changes in investor sentiment, the inclusion of gold in core inflation may not give an accurate representation of underlying inflation pressures. Indeed, core inflation excluding gold prices was 3.8 percent in November, 0.6 percentage points lower than core inflation with the divergence having reached one percentage point in August.

Consumer inflation expectations, as measured by Bank Indonesia, have also moved upwards in the last three months. Respondents expect prices to fall in February 2012 only to pick up in the subsequent three months at the beginning of the harvest season. There were also concerns cited about the inflationary impact of any future government reforms to administered fuel and electricity prices.

Inflation is expected to pick up in 2012 from the present lows and end 2012 at 5.6 percent although there remain a number of uncertainties around the outlook

With only one month remaining in 2011, headline CPI inflation at the end of 2011 is likely to be below the lower bound of Bank Indonesia's inflation target of 5 ± 1 percent. The World Bank's projection is that, with contained prices growth for volatile items continuing and the influence of base effects due to high inflation at the end of 2010, CPI inflation in the final quarter of 2011 will be 4.1 percent year-on-year. If so, this will be the first time that Indonesia has experienced GDP growth above the averages for the past decade and inflation below 5 percent at the end of the year since before the Asian Financial Crisis.

In 2012, the deteriorating global outlook is expected to flow through to the inflation projections through weaker output and credit conditions. Annual inflation is projected to increase by 4.9 percent in 2012, down 0.6 percentage points from the projection in the October 2011 *IEQ*. This is largely due to a lower base due to the weaker than expected Q4 2011 inflation outcome (contributing 0.5 percentage points of the revision) and partially from softer growth (0.1 percentage points). BI's policy stance is also a key factor, to the extent that changes in the policy rate influence price expectations and lending conditions (lending rates have declined marginally since the policy rate was cut by 75 basis points). Administered prices continue to pose the largest upside risk to the baseline forecasts which assumes no price increases on subsidy reforms (see Part B on the 2012 Budget proposals on subsidy quantity restrictions). As usual, the quality of the rice harvest in early 2012 will also be critical to the inflation forecasts. Domestic and international rice price developments will also be key to the outlook for poverty basket inflation which, under the baseline, is expected to continue easing in Q4 2011 before rising to 6.6 percent in Q4 2012.

Broader price growth in the economy also continues to be well below the average of the past two decades despite a small pickup in Q3

The broader level of prices in the economy has picked up slightly. GDP deflator inflation was 8.2 percent year-on-year in Q3 2011, up from 7.7 percent in Q2. Prices rose by 2.4 percent on a seasonally adjusted basis relative to Q2, around the average quarterly growth of the past 5 years. Investment price growth increased slightly from 5.2 percent to 5.4 percent and remains around the lowest level since 2002, due to the fall off in construction price inflation.

GDP deflator inflation is projected to tick up in Q4 2011 to 8.5 percent. The projection for the average deflator growth for 2012 has been revised down to 8.6 percent following the downward revision to consumer prices and weaker GDP growth outlook. This is a similar level to that seen during 2009 and well below the pre-international financial crisis average of 14.5 percent for 2005-2008.

6. Excluding agriculture, employment growth remains relatively strong

Non-agricultural employment continued to grow strongly in the year to August 2011...

While Indonesia's real GDP rose by 6.5 percent year-on-year in Q3 2011, employment increased by 1.5 million people in August 2011 relative to a year earlier, a rise of 1.4 percent. However, this growth rate was somewhat lower than the growth of 3.2 percent seen in August 2010 and 3.6 percent in February 2011. This was primarily due to a fall in agricultural employment in August of 5 percent year-on-year while non-agricultural employment grew at a steady 5.4 percent, or 3.6 million jobs (Figure 14). With the exception of a contraction in employment in the transport and communications sector, the contribution of the different non-agricultural sectors was relatively broad-based (Figure 15). For example, although representing a small share of total employment, the rapid growth of jobs in the financial and real estate sector moved up to a record 51 percent year-on-year. Construction sector jobs rose by 13.4 percent while manufacturing employment grew by 5.2 percent, in line with its recent relatively strong GDP growth (see Part C for a further discussion of Indonesia's manufacturing sector performance). Increasing garment production ahead of the Lebaran festive period at the end of August may have played a role in increasing demand for temporary manufacturing workers.

Figure 14: Non-agricultural growth remained strong in the year to August 2011...
(year-on-year growth, percent; unemployment rate, percent)

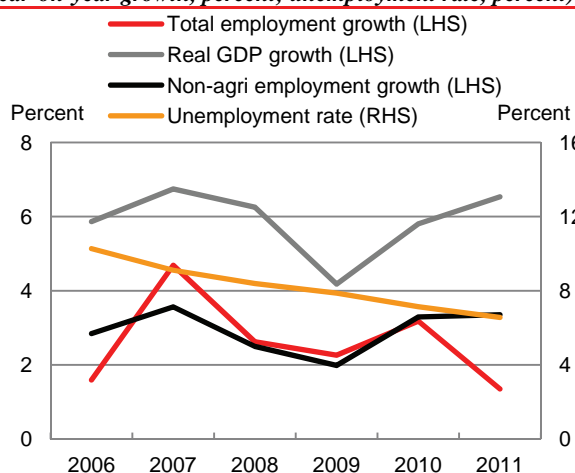
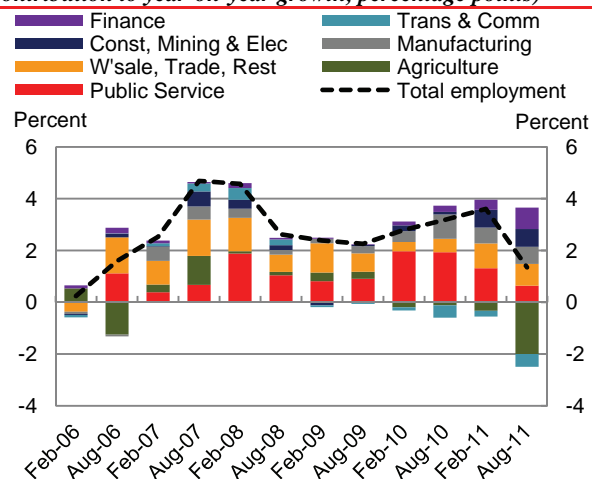


Figure 15: ...with relatively broad-based contributions to employment growth across the non-agricultural sectors
(contribution to year-on-year growth, percentage points)



Note: Year-on-year growth rates. Labor market data is for August, real GDP growth is for Q3
Sources: BPS and World Bank staff calculation

...and the unemployment rate has decreased and the share of salaried workers has risen...

Employment growth of 1.4 percent outpaced the 0.7 percent year-on-year rise in the labor force. As a result the official open unemployment rate declined to 6.6 percent in August 2011 from 7.1 percent a year earlier, continuing the gradual unemployment rate declines of recent years (Figure 14). Looking across the labor force, unemployment rates for graduates of high school or above have particularly fallen. The unemployment rates for members of the labor force with a diploma fell to 7.2 percent in 2011 from 12.8 percent in 2010. For university graduates the rate dropped to 8.0 percent from 11.9 percent.

...but further enhancements of quality job creation are needed if the benefits of Indonesia's economic growth are to be shared throughout the population

The majority of Indonesia's working population of 109.7 million is still concentrated in the agricultural and informal sectors. Although the employment share of agriculture has moved down gradually from over 50 percent in the early 1990s, it remains high at 36 percent. Similarly, BPS figures indicate that the informal sector accounts for 62 percent of employment, mostly within the agriculture sector. There has been a gradual rise in the share of salaried workers, i.e. those identified as 'people with employee status', which may be viewed as higher quality jobs. This moved up to around a third of total workers in August 2011 from under a fifth in 2009.

Continued strong growth in employment opportunities is needed to absorb the almost 2 million new people entering Indonesia's labor force each year. In recent years the elasticity of employment growth to GDP growth has been around 0.5 (i.e. every 1 percentage point of GDP growth is associated with 0.5 of a percentage point of employment growth or around 500,000 to 600,000 jobs). The corresponding figures for August 2011 were somewhat lower at around 224,000 jobs per 1 percentage point of GDP growth. For economic growth to improve the welfare of the population it is not just the number of jobs that are created that matters, it is also the quality of jobs available for those entering the labor force or for workers moving out of lower productivity, lower wage, informal or agricultural sectors. Non-traditional sectors such as finance and real estate and manufacturing have increased their contribution to employment growth in the last two years and can potentially provide important sources of higher productivity and higher wage jobs. More broadly, realizing growth with quality job creation will require, for example, improvements in skills, education and training, provision of better services to match employers and job seekers, and a supportive regulatory environment.

7. The fiscal deficit in 2011 is likely to come in below the revised Budget level

The Government expects the 2011 budget deficit to be lower than the level projected in the revised Budget...

The Government has indicated that it expects the 2011 fiscal deficit to be around 1.7 percent of GDP,² lower than the revised Budget estimate of 2.1 percent of GDP or IDR 151 trillion. The downward revision is mostly due to stronger than expected revenues and lower capital expenditures, offsetting higher spending on energy subsidies. The approved 2012 Budget, which is discussed in more detail in Part B, projects a slight decline in deficit to 1.5 percent of GDP, or IDR 124 trillion.

...with the cumulative budget to end October remaining in a small surplus

As of end-October, the budget remained in a cumulative surplus of IDR 4.8 trillion. Assuming that current performance of revenue collection and expenditure realization continues until the year end, the World Bank projects a deficit of 1.6 percent of GDP, slightly higher than the 1.5 percent of GDP projection in the October 2011 *IEQ*. The difference with the latter reflects higher subsidy spending due to a slightly higher oil price assumption to reflect outcomes over the year.

Government revenues in 2011 have broadly remained in line with recent trends, with a slight slowing in oil & gas non-tax revenues

Recent trends in central government revenue collections have been sustained over the last quarter, although there has been a slight slowing in oil & gas non-tax revenues. Total central government revenue in the first 10 months of the year reached IDR 897 trillion, up 19.1 percent on the corresponding period of 2010. Tax revenues were up 20.4 percent, while non-tax revenues were up 15.6 percent.

The revised World Bank revenue forecasts for 2011 are slightly lower in aggregate than those in the October *IEQ*, as a result of the weakness in oil & gas non-tax revenues, while the tax revenue projections remain unchanged. The weakness in oil & gas non-tax revenues is probably linked to oil lifting levels which have been lower than assumed in the revised Budget. Oil lifting for 2011 may come in around 900,000 barrels per day, versus the revised Budget assumption of 945,000 barrels per day.

Weaker disbursement of core programs and stronger energy subsidy spending continues

On the expenditure-side, by end-October the Government disbursed around 68 percent of the revised Budget spending allocation, slightly above the 2010 level of 65 percent. Both central government spending and transfers to region are broadly in line with last year's performance (Figure 16). However, within central government spending categories the performance varies.

² <http://koran-jakarta.com/index.php/detail/view01/76706>

Disbursement of core programs continues to be weak while the disbursement rate for energy subsidy spending has been relatively high. By end-October, disbursements of material and capital expenditures reached only 51 percent and 38 percent of their revised Budget allocations respectively, behind the 2010 equivalent levels of 56 percent and 41 percent respectively. However, in nominal terms both types of spending have grown significantly relative to the first ten months of 2010, with capital spending up 16 percent and materials up 38 percent. Social expenditure spending through October has also been low, at only 47 percent of the revised Budget level, lower than the 2010 level of 66 percent. This has been due, in part, to an unexpected increase in the revised Budget education allocation in the form of social assistance in order to meet the '20 percent rule' of education to total spending. Other factors include slow processes of beneficiary verification and the nature of programs such as the Jamkesmas health insurance for the poor which will be disbursed against the actual spending at the end of the year. In contrast, by end-October energy subsidy spending had reached 85 percent or IDR 165 trillion out of the IDR 195 trillion revised Budget allocation, with nominal spending up by 84 percent from 2010 levels.

Figure 16: Disbursement rates have been weak for core programs but energy subsidy spending has been high
(actual cumulative expenditures in first ten months of the year as share of revised Budget allocation)

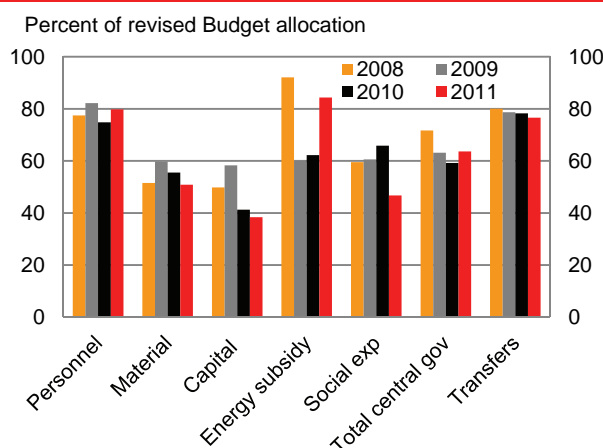
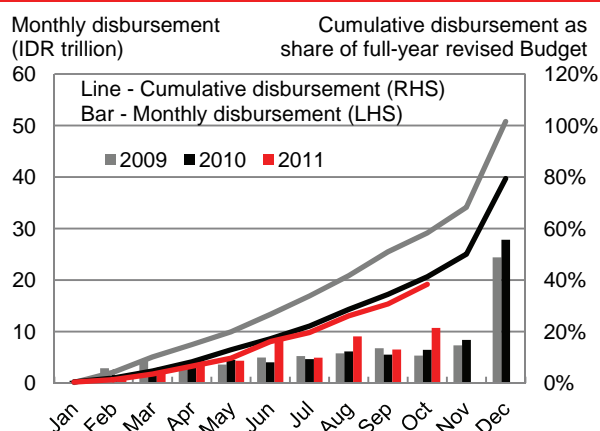


Figure 17: Nominal capital expenditures improved but the disbursement rate remains below that of previous years
(monthly capital expenditure, IDR trillion; and cumulative capital expenditures as share of revised Budget allocation)



Sources: Ministry of Finance and World Bank staff calculations

Budget execution remain a major challenge, particularly for capital spending, constraining the acceleration of infrastructure development

The continued weak performance of capital expenditures is mostly attributed to infrastructure projects. Though the Government has made addressing infrastructure bottlenecks a priority and increased capital expenditures by 28 percent in 2011, persistent budget execution challenges hinder the effective implementation of this spending. Some long standing issues remain major constraints, such as the complicated land acquisition process particularly for new infrastructure projects (although on this topic there is reported to be progress in the legislative process of the Land Acquisition Bill). Another constraint is the lengthy budget revision or virement processes especially for projects that received additional budget allocation. Some of the reforms introduced to accelerate budget execution in 2010, such as early procurement (before the beginning of the fiscal year) and the multi-year appointment of implementing unit managers (Satker), have had limited impact due to a lack of socialization and the necessary technical regulations, or inconsistencies with other or higher regulations. In addition, a new challenge in 2011 was posed by the limited preparation of the necessary human resources and infrastructure for the implementation of a new procurement system.

Energy subsidies will likely exceed the revised Budget allocation

The realized levels of the oil price and subsidized fuel consumption are likely to be higher than the revised Budget assumptions. By end-November the average Indonesian crude oil price outcome was USD 113 per barrel, well above the revised Budget assumption of USD 95. As a result, the volume and cost of energy subsidies are likely to be higher than in the revised Budget, as large differences between market and regulated prices leads to increased consumption of subsidized fuel and divergence to not-intended beneficiaries.

Table 4: The Budget deficit is projected to fall in 2012
(IDR trillion, unless otherwise indicated)

	2010 Outcome	2011 Revised budget	2011 (p) WB Sept estimates*	2011 (p) WB Dec estimates*	2012 Budget	2012 (p) WB Dec estimates*
A. State revenue and grants	1,014.0	1,169.8	1,185.8	1,179.4	1,311.4	1,329.6
1. Tax revenue	744.1	878.6	857.1	857.4	1,310.6	985.8
a. Domestic tax	715.2	831.7	801.5	802.1	989.6	931.9
i. Income tax	356.6	431.9	419.7	419.1	520.0	487.3
- Oil and gas	58.9	65.2	65.4	64.9	60.9	66.7
- Non oil and gas	297.7	366.7	354.4	354.2	352.9	420.6
ii. Other domestic taxes	358.6	399.8	381.8	383.0	469.7	444.6
b. International trade tax	28.9	46.9	55.5	55.3	42.9	53.9
i. Import duties	20.0	21.5	25.4	25.2	23.7	27.5
ii. Export duties	8.9	25.4	30.1	30.1	19.2	26.4
2. Non-tax revenue	267.5	286.5	328.7	322.0	278.0	343.8
<i>o/w natural resources</i>	170.1	192.0	213.1	204.3	177.3	212.7
i. Oil and gas	152.7	173.2	192.8	184.3	159.5	190.2
ii. Non oil and gas	17.3	18.8	20.2	20.0	17.8	22.5
B. Expenditure	1,053.5	1,320.8	1,296.7	1,295.1	1,435.4	1,414.1
1. Central government	708.7	908.3	878.6	872.8	952.5	944.7
- Personnel	147.7	182.9	181.9	175.6	215.7	214.5
- Material expenditure	94.6	142.8	121.8	121.4	142.2	125.0
- Capital expenditure	75.5	141.0	122.6	119.8	168.3	154.6
- Interest payments	88.3	106.6	104.2	106.6	122.2	120.7
- Subsidies	214.1	237.2	256.8	276.3	208.9	235.4
- Grants expenditure	0.1	0.4	0.4	0.2	1.8	1.8
- Social expenditure	68.4	81.8	76.8	63.2	64.9	59.7
- Other expenditures	20.0	15.6	14.1	9.7	28.5	33.0
2. Transfers to the regions	344.7	412.5	418.1	422.2	470.4	469.4
C. Primary balance	48.9	-44.4	-6.8	-9.1	-1.8	36.2
D. SURPLUS / DEFICIT	(39.5)	(151.0)	(111.0)	(115.7)	(124.0)	(84.5)
Deficit (percent of GDP)	(0.6)	(2.1)	(1.5)	(1.6)	(1.5)	(1.0)
Economic assumptions/outcomes						
Gross domestic product (GDP)	6,423	7,227	7,401	7,409	8,120	8,542
Economic growth (per cent)	6.1	6.5	6.4	6.4	6.7	6.2
CPI (per cent)	5.1	5.7	5.7	5.6	5.3	5.5
Exchange rate (IDR/USD)	9,074	8,700	8,662	8,742	8,800	8,800
Interest rate of SBI (average %)	6.4	5.6	6.8	6.6	6.0	6.0
Crude oil price (USD/barrel)	79	95	105	111	90	110
Oil production ('000 barrels/day)	954	945	945	900	950	920

Note: * World Bank revenue forecasts are based on a different methodology to the Government to derive projections for nominal GDP (see Part C of the June 2010 IEQ for a full discussion). ** interest rate for 2010 and 2011 Budget is 3-month SBI and for 2011 revised Budget and 2012 proposed Budget is 3-month Treasury bill. World Bank is BI policy rate

Source: MoF and World Bank staff projections

Looking towards 2012, the World Bank forecasts a fiscal deficit of 1 percent of GDP

The World Bank projects a fiscal deficit for 2012 of 1 percent of GDP (Table 4). The divergence with the 2012 approved Budget level of 1.5 percent of GDP reflects a baseline assumption of continued strong revenue collection performance, although at a slightly lower growth rate than in 2011, and ongoing challenges with budget execution. The slowing in revenue growth is a result of lower expectations for all oil & gas related revenues along with a moderation in forecast nominal economic growth and commodity prices. Somewhat offsetting this would be the impact of the proposed increase in excise duties which were announced in the 2012 Budget, if passed by parliament before the end of the year. Weak core program disbursement will likely offset greater expenditure on energy subsidy relative to the Government's projections due to a higher oil price assumption. This projection assumes a gradual implementation of any fuel subsidies reform, with limited impact on fuel subsidy outlays in 2012.

Commodity prices and oil lifting volumes remain key risks to the Budget projections

The key risk to the budget remains its exposure to commodity price fluctuations, given the large proportion of related items on both the revenue and expenditure sides. Oil lifting is also crucial. The 2012 Budget assumption of 950,000 barrels per day looks relatively optimistic versus the likely average lifting level for 2011 of 900,000 mentioned above and compared with some recent industry commentary which suggests a figure of 920-930,000 barrels per day for 2012.

The Government has completed its securities issuance for 2011

In light of the financing already achieved, and a 2011 deficit likely to come in below the revised Budget levels, the Ministry of Finance announced in early December that it had completed its securities issuance for the year and cancelled the planned auction of IDR 6.5 trillion of domestic securities. Total net financing had reached IDR 97.5 trillion by the end of November with net government securities issuance of IDR 121.1 trillion (relative to the 2011 revised Budget target level of IDR 126.7 trillion). Net financing from securities totaled just under IDR 40 trillion over the months of October and November, following negative net issuance in September (during which buy backs supported bond prices during the period of strong portfolio outflows). Recent issuance included an international Sukuk placement in mid-November of USD 1 billion at a yield of 4 percent which received orders of USD 6.5 billion.

Gross financing needs for 2012 are estimated at IDR 287.6 trillion including amortizations of IDR 153.0 trillion (Debt Management Office figures based on the proposed Budget deficit). The Government's financing plan is again focused primarily on domestic government securities (see Part B for more details). While accumulated cash balances provide a financing cushion for the Government, the spillovers from international market developments to the cost and availability of bond financing will continue to be watched carefully.

8. Near-term risks from international developments are weighted to the downside

Developments in the global economy and financial markets remain the key downside risk to Indonesia's short-term outlook...

Risks to the outlook for the Indonesian economy remain weighted to the downside. As reported above, global financial markets and portfolio flows to Indonesia remain volatile, with the global economic outlook highly uncertain. The baseline scenario remains one of weaker growth in high income economies, moderating commodity prices and continued financial market turbulence. The direct impact of lower growth in the EU and US on Indonesia's economy is likely to be limited. However, there is the risk of deterioration to more adverse, but less probable, scenarios, as outlined in the October 2011 *IEQ*. In the event of these two scenarios - a major freezing up of international financial markets or even also a severe, prolonged downturn, encompassing the major emerging economies - the external shocks hitting Indonesia through the trade and commodity and financial channels would be more significant, pushing growth below the baseline projection. If, alternatively, Euro zone uncertainty is resolved quicker than expected, strong capital flows could return to emerging markets, along with the challenges that they bring.

...and further deteriorations in international financing conditions or commodity prices and demand would be of particular concern

Although not the baseline scenario, movement towards a more severe international financial crisis scenario, involving a seizing up of global dollar liquidity, could have important implications for Indonesia's financial sector, and potentially have spillovers to the real economy, through investment and trade financing, and to government financing costs. The risk of such a tightening materializing seemed to increase through November, but was eased somewhat by the coordinated policy action of major central banks. Commodity price movements remain a key risk to the outlook. Lower commodity prices due to the weaker external environment could affect Indonesia's GDP growth via their impact not only on trade but through domestic consumption and investment. They would also lower fiscal revenues from the resource sector (see Part B of the June 2010 *IEQ*).

However, Indonesia is well-placed to weather such shocks and measures have been taken to enhance crisis preparedness

Indonesia remains well-positioned to withstand external real and financial shocks due to its continued strong economic performance and policies, low government debt levels and significant reserves. The fiscal deficit is restrained and, importantly, the 2012 Budget also sets out a number of measures to deal with any future crisis situation, including, for example, a bond stabilization framework and mechanisms to adjust spending and financing as needed (as discussed in Part B). As outlined above, banking sector performance remains sound and, in an important regulatory development, the long-awaited Financial Services Authority Bill was passed, although transition risks will need to be managed and progress on the financial sector safety net law would add further strength to the ability of the authorities to address future financial shocks.

There are both upside and downside risks to the domestic inflation outlook

Forecasts for a continued gradual moderation in global commodity prices, and potential weaker domestic activity growth, are supportive of a relatively benign baseline inflation outlook. However, domestic rice supply shocks could put upward pressure on prices. In the event of such shocks it will be important that policy responds appropriately to anchor inflation expectations. Increases in administered energy prices also pose an inflationary risk, depending on their nature and magnitude, but, with inflation projected to be relatively low, 2012 could represent a valuable opportunity to push forward with such reforms.

Addressing domestic capacity constraints and improving the investment climate can enhance the medium-term growth outlook

Looking towards the medium-term, domestic capacity constraints and the business climate remain key development challenges which can improve Indonesia's growth outlook and promote quality job creation, as discussed in Part C in the context of the manufacturing sector's performance. While the 2011 and 2012 Budgets included a substantial rise in the allocation of spending to capital expenditures, budget execution difficulties lead to the risk that these funds are not fully disbursed or are not spent efficiently. Progress in these areas could provide upside potential to the medium-term growth outlook and could also in the near-term support investor confidence in the fundamentals of Indonesia's economy.

B. SOME RECENT DEVELOPMENTS IN INDONESIA'S ECONOMY

1. A 2012 Budget focusing on crisis preparedness and medium-term development

Indonesia's 2012 Budget was approved in late October 2011 and, with the international environment deteriorating, it included measures on crisis preparedness amongst its policy initiatives

The 2012 Budget was approved by Indonesia's Parliament on 28 October, after a series of deliberations. The approved Budget is broadly in line with the proposals submitted by the President on 16 August. The Government and Parliament have focused on crisis preparedness, as concerns over the deterioration in the international economic environment have intensified since mid-August, as well as spending to support medium-term growth. This section provides a brief overview of the Budget, outlining the high-level objectives, key projections, and some areas of particular interest, including not only the features on crisis preparedness but measures to improve the budgeting framework such as performance-based budgeting and medium-term expenditure frameworks.

a. Balancing spending on development needs with fiscal restraint

The Budget aims to support the economy while maintaining fiscal stability...

The overall theme of the Budget is "accelerating and expanding the quality, inclusiveness and equity of economic growth to improve the welfare of the Indonesian people". The direction of fiscal policy for 2012 is aimed at supporting economic activity through increasing the allocations for capital expenditure and infrastructure, while maintaining economic stability and fiscal sustainability. Increasing the effectiveness and efficiency of central government spending and transfers to the regions is also a central focus, as seen in the Presidential instruction to improve the efficiency of spending on goods and services (including official travel) and to reallocate the savings to priority programs and new initiatives to support the *Master Plan 2011-2025 (MP3EI)* and the current medium-term development plan (*RPJMN*) 2010-2014. The overall deficit remains restrained at IDR 124 trillion or 1.5 percent of GDP; lower than the deficit of IDR 151 trillion or 2.1 percent of GDP in the 2011 revised Budget (which, as discussed in Part A, is likely to be undershot).

...and includes policies under four pillars - pro-growth, pro-poor, pro-job and pro-environment

Consistent with its theme and national priorities, the 2012 Budget includes a four-pillar development strategy of policies which are pro-growth, pro-job, pro-poor, and pro-environment. The pro-growth strategy aims at accelerating and expanding economic growth through infrastructure development, which remains a top priority in 2012, and through some new initiatives as part of *MP3EI* to improve domestic connectivity. The pro-job strategy includes provision of fiscal incentives to attract investment and to encourage export industries. The pro-poor policy will be implemented through a continuation of existing social programs and new initiatives including the "cluster 4" poverty programs such as creating affordable housing and public transport, improving clean water supplies, efficient and affordable electricity, improving fishermen's livelihoods, and reducing urban poverty. Finally, the pro-environment policy will be implemented by enhancing mitigation and the adaptive capacity to respond to climate change. Reflecting these pillars the Government has set out measurable development targets to be achieved by end-2012. These include, for example, reducing the national poverty rate to 10.5-11.5 percent (from 12.5 percent in March 2011) and the unemployment rate to 6.4-6.5 percent (from 6.6 percent in August 2011). The pro-job pillar is seen in the target for the creation of 450,000 jobs for every additional 1 percent of economic growth.

b. Some special features of the 2012 Budget³

The 2012 budget introduced some new features on crisis preparedness and public financial management

In addition to the above broad policy priorities, the 2012 Budget contains some other positive features of interest from both a near- and medium-term fiscal policy perspective. The recent deterioration in the international economic environment and the volatility in food prices that was seen over 2008 and 2010 have prompted the Government and Parliament to introduce measures that give the Government flexibility to better manage and mitigate these risks. In addition, as part of broader public financial management reforms, the Government has introduced performance-based budget mechanisms and a medium term expenditure framework since the 2011 budget and the 2010-14 RPJM. With the 2012 budget, the Government has included comprehensive information on the forward expenditure estimates in the Budget documents, providing forecasts out to 2015. In addition, the budget submission formats have generally been aligned with reforms reflecting, among other things, the separation between on-going and new initiatives,

³ This section is based on draft 2012 Budget Law that has been approved by parliament

The 2012 Budget Law introduces measures that allow the Government to act swiftly in the event of financial and economic crisis and reduce fiscal risks...

Over the past couple of years Indonesia has seen strong capital inflows; particularly into domestic currency government bonds (see the December 2010 *IEQ*). However, reliance on international sources of finance can pose a fiscal risk, to the cost and availability of financing, when sentiment reverses, as seen in late 2008. To mitigate the effects of such shocks, the Government has introduced a bond stabilization framework and other crisis management procedures within the Budget Law (see Box 2 for more details).

...and also provides increased flexibility to mitigate risks arising from food price volatility

The 2012 Budget Law also provides the Government with increased flexibility to mitigate risks arising from food price volatility. In the event of a spike in global food prices (such as those of 2008 or the second half of 2010), the Government can swiftly implement responsive policy measures as well as raise the necessary financing.

Box 2: Crisis preparedness measures in the 2012 Budget

In the past, the Government had to go through a lengthy parliamentary approval process when responding to crisis situations, delaying decision making and hence affecting the potential effectiveness of policy responses. The 2012 Budget puts in place some key measures which can help the Government better manage and mitigate risks from financial and commodity prices shocks. These include, for example, the following:

Developing a crisis management protocol: The Ministry of Finance is developing a crisis management protocol to guide the decision making process in the event of a financial crisis. This protocol will later be stipulated as a Ministry of Finance Decree.

Bond stabilization framework: This aims to stabilize the government bond market when there is a sudden reversal in capital flows or shocks (Article 40 and 43). It includes a number of potential actions including the Ministry of Finance buying back bonds in secondary markets by using allocated budget funds or other sources such as the Government's un-spent fiscal balance (SAL) and the buy-back of bonds by SOEs under coordination of the Minister for SOEs. The Government is also exploring the creation of a bond stabilization fund, a special account to stabilize the government bond market in the case of crisis.

Contingency plans in responding to crisis or emergency situations: The Budget Law introduces measures that allow the Government to respond rapidly to a financial crisis, subject to parliamentary approval, which is required within 24 hours (Article 43). The classification of an emergency situation includes (i) growth a minimum of 1 percent lower than the Budget assumption and the deviation of other macro assumptions by a minimum of 10 percent or a minimum of 5 percent for crude oil lifting, which could lead to significantly lower revenues and/or increased expenditures; (ii) a systemic crisis in the domestic financial and banking system requiring additional funds for guaranteeing deposits for financial and non-financial institutions; (iii) a significant increase of financing costs, i.e. rise in government bond yields. In response to such events the Government, upon the approval of Parliament, may, for example, carry out expenditures that have not been budgeted or that may exceed the initial budget level, reallocate funds within programs and types of expenditures and cut spending through improving efficiency, while still achieving the outcomes of programs. It can also use its un-spent fiscal balance (SAL) to close the financing gap, increase bond issuance above the initial Budget level and seek alternative financing sources from bilateral and multilateral creditors.

The Government is implementing a number of important public financial management reforms including the roll out of performance-based budgeting and the presentation of a medium term expenditure framework...

As mandated by The State Finance Law (UU 17/2003) the Government is undertaking public financial management reforms to improve the effectiveness, efficacy, transparency and accountability of the budgeting system. This includes the implementation of a unified budget, a medium-term expenditure framework (MTEF) and performance-based budgeting (PBB). PBB aims at improving the link between performance - expressed as outputs or outcomes - and budget allocations in order to improve efficiency, accountability and transparency. PBB was piloted in 2009 in six ministries and introduced in the 2011 Budget along with a MTEF. The MTEF aims at synchronizing medium-term forecasts prepared by line ministries (a bottom-up approach) with the (top-down) estimated resource envelope. In the 2012 budget the government has included the MTEF in the official budget documentation by displaying detailed expenditure forecasts and aligning the budget submission formats. The MTEF was also presented in the 2012 Budget Financial Note with expenditures projected for the next three years as medium-term baseline projections.

...as well as incentive mechanisms aimed at improving the quality of spending and accelerating budget execution

Article 20 of the Budget Law also outlines incentive mechanisms, so-called “rewards and punishments”, aimed at improving spending quality and budget execution. Line ministries can utilize funds from efficiency savings in the next fiscal year. Line ministries who cannot spend their budget without a good explanation will see their allocation reduced in the next year, which could be the maximum amount of their unspent budget. Finally, to enhance the effectiveness of projects funded by domestic loans, Article 25 of the Law specifies that projects can be implemented within a multi-year framework (which has already been applied for projects funded by foreign loans). There is also a regulation in place allowing multi-year contracting for rupiah-financed projects, but under rather strict conditions, and only a small fraction of total capital spending has been approved as multi-year contracts.

c. The fiscal deficit is targeted to narrow gradually to 1.5 percent of GDP in 2012

Indonesia's tax-to-GDP ratio is projected to increase from 12.2 in 2011 to 12.7 percent of GDP in 2012

Tax-to-GDP is projected to rise from 12.2 percent in 2011 (the revised Budget figure) to 12.7 percent in 2012. Nominal tax revenues are projected to rise by 18 percent from the 2011 revised Budget level, driven by strong growth in non-oil income taxes, the VAT and excise duties, in line with the projected strength of the economy (with growth assumed at 6.7 percent, as outlined in Box 3) and some moderation in commodity prices. Of note, oil income tax is expected to decline in light of a lower oil price assumption.

A tax census has been introduced with the goal of broadening the income taxpayer base

The Ministry of Finance launched a national tax census in September which is planned to continue through to December 2012. It aims to capture at least 1.5 million taxpayers, both individual and corporate, to better understand and direct future policy to increase taxpayer compliance, which is an ongoing challenge for Indonesia. For example, press reports indicate that only 466,000 firms of the 12.9 million active businesses and 22.6 million active enterprises in Indonesia paid taxes in 2010.⁴ Similarly for personal income tax only 8.5 million people paid their taxes in 2010, compared with 100 million active workers.

Non-tax revenue is projected to weaken slightly in 2012, mainly driven by lower oil price assumptions

Nominal non-tax revenues are anticipated to fall by 3 percent in 2012 relative to the 2011 revised Budget (moving from 4 percent of GDP in 2011 to 3.4 percent of GDP in 2012). This is mainly due to the lowering in the oil price assumption to USD 90 per barrel from USD 95 in 2011. However, there is a downside risk to non-tax revenues from oil lifting given recent trends and the fact that this tends to have been overestimated in Budgets of recent years (see June 2011 *IEQ*). However, efforts are being made to increase investment in oil exploration although this would only have a lagged effect on revenues.

Box 3: The macroeconomic assumptions for the 2012 Budget and medium-term expenditure framework

The macro assumptions underlying the approved 2012 Budget are in line with those of the proposed Budget, with the exception of a slight downward revision to the SBN interest rate from 6.5 to 6.0 percent. The growth assumption of 6.7 percent was unchanged despite the growing downside risks highlighted in Part A. Inflation is projected to moderate to 5.3 percent in 2012. The oil price assumption for 2012, unchanged from the proposed Budget, is USD 90 per barrel while the oil lifting assumption of 950,000 barrels per day (bpd) would imply a sizeable improvement on recent trends (with actual oil lifting in the 12-months to September at 897,600 bpd).

Table 5: The Government macro assumptions

	2011 Revised Budget	2012 Proposed Budget	Budget	2013 Projection	2014 Projection	2015 Projection
Real GDP growth (percent)	6.5	6.7	6.7	6.7-7.4	7.0-7.7	7.0-8.0
Inflation (percent)	5.7	5.3	5.3	3.5-5.5	3.5-5.5	3.5-5.5
Exchange rate (IDR/USD)	8,700	8,800	8,800	8,800-9,200	8,800-9,200	8,900-9,300
Interest rate (SBN, percent)	5.6	6.5	6.0	5.0-7.0	5.0-7.0	5.0-7.0
Crude oil price (USD per barrel)	95	90	90	80-100	80-100	80-100
Oil lifting ('000 barrels per day)	945	950	950	970-990	970-1,000	1,000-1,010

Source: Ministry of Finance

Looking forward to 2015, growth is projected to rise to an ambitious 7 to 8 percent by 2015. Inflation is expected to continue to moderate and remain in the range of 5.3 to 5.5 percent with the Rupiah stable at around 9,000 per US dollar. Oil lifting is also projected to rise gradually to above 1,000 bpd, which will need a supportive investment climate and infrastructure.

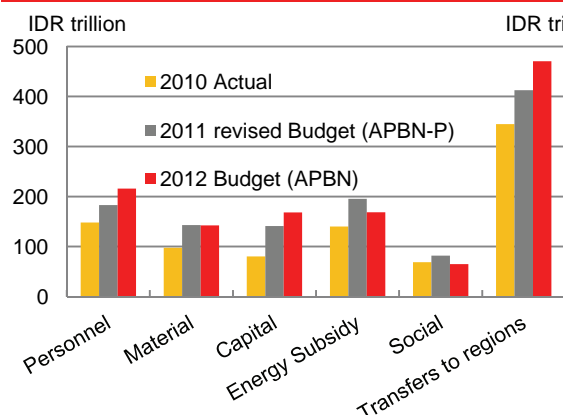
⁴ The Jakarta Post, 22 August 2011, *Tax office counts on census to meet revenue target*, <http://www.thejakartapost.com/news/2011/08/22/tax-office-counts-census-meet-revenue-target.html>.

The 2012 Budget again significantly boosts capital expenditure, although ongoing budget execution challenges could hinder the effectiveness of the increased allocation on infrastructure

Overall expenditure is budgeted to increase by 8.7 percent in 2012 from the revised 2011 Budget level. Total central government spending is set to rise by 5 percent while regional transfers are up 14 percent, mainly due to a 21 percent increase in the general block grant (DAU) allocation. Personnel expenditures are up by 18 percent reflecting a 10 percent average increase in salaries, a 13 month salary payment, and a continuation of the process of bureaucracy reform (Figure 18:). Material expenditures are down slightly in nominal terms, reflecting ongoing efforts to improve efficiency.

Following their significant increase in 2011, capital expenditures again receive a sizeable boost (up 19 percent relative to the 2011 revised Budget) reflecting the Government's priority on addressing infrastructure capacity constraints, improving domestic connectivity and energy security, and achieving "minimum essential forces". As a result, the Ministry of Public Work and Ministry of Transportation are to receive increased allocations and are projected to be among the top ten highest spenders for 2012 (Figure 19). However, as highlighted in previous *IEQs*, if this increased budget allocation to capital expenditures is to be effective, and is to contribute to the Government achieving its targets in improving the quality and access to key infrastructure, constraints on budget execution need to be addressed urgently.

Figure 18: Spending on personnel, capital and transfers to the regions are projected to rise most notably in 2012...
(IDR trillion)

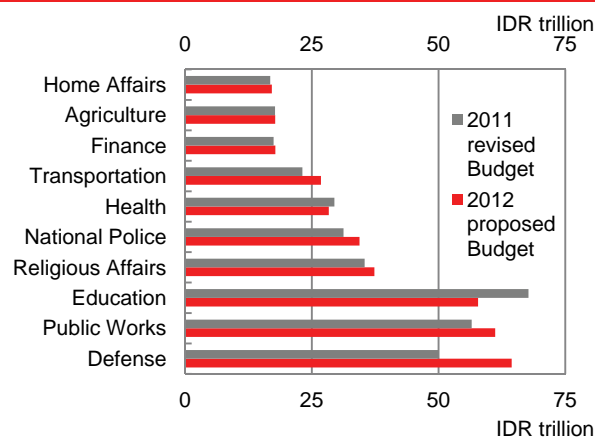


Source: Ministry of Finance

Key sectors such as infrastructure, education, and agriculture see a modest rise in their spending allocation for 2012, following significant increases in increase in 2011,

The significant expenditure increases seen in 2011 in key sectors such as infrastructure, agriculture, and defense are sustained through more modest rises in 2012. Transport, water and sanitation, and irrigation all received a 5 percent increase in their budget allocation. This reflects the Government's spending priorities as discussed in the Government Annual Working Plan (RKP) and in line with the medium term development plan. However, central government spending on the health sector is still relatively modest at IDR 14.7 trillion or roughly only 9 percent of spending on energy subsidies.

Figure 19: ...with increased allocations to the Ministry of Public Works and Ministry of Transportation
(IDR trillion)



Source: Ministry of Finance

Social expenditures are set to continue the Government's effort in reducing poverty and protecting the poor and vulnerable

The central government social expenditure allocation in 2012 is IDR 65 trillion, a 20 percent fall relative to the 2011 revised Budget. However, this relative decline is in part due to the significant rise in the level of such spending in the 2011 revised Budget. This reflected an increase in education expenditure in the form of social assistance, such as the school support program (BOS), as education spending is required to be a minimum of 20 percent of total spending. The remaining social spending covers continuation of programs such as scholarships for poor students, social insurance (*Jamkesmas*), conditional transfers to poor families (PKH) and the community-based development program (PNPM). To improve the distribution of BOS assistance, in 2012 the central government will channel the fund through provincial governments which will subsequently distribute the funds to schools. In 2011, the BOS was distributed by district governments and this was reported to be very slow due to fragmented fund channeling.

Energy subsidy spending is projected to remain significant in 2012 at 12 percent of total expenditures or 2.1 percent of GDP

Energy subsidy spending in 2012 is projected at 12 percent of total spending or 2.1 percent of GDP (Table 6). For fuel subsidies, it was agreed to maintain the subsidized fuel quota at 40 million kilolitres (m KL) in 2012, marginally lower than 2011's quota of 40.4 m KL. A potential fuel subsidy reform in 2012 focuses on quantity restrictions rather than increases in the subsidized fuel price. The Government has again raised the option of restricting private cars in Java and Bali from using subsidized fuel from April 2012. This plan was initially due to be implemented in April 2011 but was postponed due to the lack of infrastructure to support the policy.

The risks to budget spending of fuel subsidies are both in terms of quantity and price. Absent the proposed quantity restrictions, the Government estimates that subsidized fuel consumption would be 43.7 m KL, 10 percent more than budgeted (including the 2.5 m KL in the reserve allocation). The Budget oil price assumption of USD 90 per barrel for 2012 also appears somewhat conservative, as in 2011. However, the oil price outlook to a large extent depends on the strength of global demand, which remains highly uncertain.

The Government has also indicated that it will increase electricity tariffs by 10 percent on average in April 2012 for customers with connections above 450 V. However, this is subject to parliamentary approval, with deliberations scheduled for January 2012. Approval of the increase is uncertain; in 2011, the Government also proposed to increase the electricity tariff by 15 percent on average, but this was not approved by Parliament. To anticipate the fiscal risks from the potentially higher spending and deficit if the tariff increase is not approved, the Government is given increased flexibility to use unspent fiscal balances (SAL) of up to IDR 10 trillion (Article 15).

Table 6: Energy subsidies are set to continue to consume a significant share of budget expenditures
(IDR trillion unless indicated)

	2008	2009	2010	2011	2012	
	Audited	Audited	Audited	Revised Budget	Proposed Budget	Budget
Total expenditure	986	937	1,042	1,321	1,418	1,435
Energy subsidy	223	95	140	195	169	169
Fuel subsidy	139	45	82	130	124	124
Electricity subsidy	84	50	58	66	45	45
<i>Memo: Energy subsidy as share of:</i>						
Total expenditure (percent)	22.6	10.1	13.4	14.8	11.9	11.7
GDP (percent)	4.5	1.7	2.2	2.7	2.1	2.1

Sources: Ministry of Finance

As in 2011, fiscal financing in 2012 is projected to come primarily from domestic government securities

The 2012 financing policy is to prioritize domestic financing sources, especially Rupiah bond issuance, and use foreign official financing mainly for investment projects, including through subsidiary loans to SOEs and sub-national governments. Net financing needs for 2012 of IDR 124 trillion (1.5 percent of GDP) are projected, as in 2011, to be financed primarily by net issuance of government securities (of IDR 135 trillion versus IDR 127 trillion in the 2011 revised Budget). As in 2011, net external official financing in 2012 is slightly negative, at IDR 2 trillion. Debt Management Office figures based on the proposed Budget deficit put 2012 gross financing needs (i.e. the deficit, non-debt financing needs plus amortizations) at IDR 288 trillion (3.5 percent of GDP) with IDR 240 trillion targeted from government securities and IDR 17 trillion and IDR 39 trillion from official program and project loans respectively. The financing outlook is bolstered by the Government's cash balances and likely over-financing again in 2011. However, the scale of the gross financing needs, and the projected reliance on bond issuance, provide an indication of the sensitivity of the financing outlook should the international environment deteriorate into a more adverse scenario involving a further protracted rise in risk aversion.

Looking towards 2015 the budget balance is projected to move to surplus

The MTEF projects a gradual move towards a balanced budget in 2015 (Table 7) with revenues assumed to grow on average at 11.5 percent per year compared with expenditure growth of 7.4 percent. To achieve its ambitious development targets, as outlined in the MP3EI and the RPJMN (including the move to universal social security discussed in the following section), while also moving the deficit to balance and beyond, will require the Government to undertake bold policies to re-allocate spending and improve its efficiency. Within such a scenario of declining deficits, the considerable opportunity cost of current levels of energy subsidy spending is particularly highlighted given Indonesia's pressing needs for infrastructure and social expenditures.

Table 7: The Budget deficit is projected to fall gradually
(IDR trillion unless indicated)

	2011 Revised Budget	2012 Proposed Budget	Budget	2013 Projection	2014 Projection	2015 Projection
A. Revenues and Grants	1,170	1,293	1,311	1,438	1,614	1,815
(percent of GDP)	16.2	15.9	16.2	16.0	14.7	14.3
1. Tax Revenues	879	1,019	1,033	1,165	1,335	1,530
2. Non Tax Revenues	287	273	278	272	278	285
B. Expenditures	1,321	1,418	1,435	1,546	1,681	1,777
(percent of GDP)	18.3	17.5	17.7	17.2	15.3	14.0
I. Central Government, o/w	908	954	953	1,025	1,107	1,134
Line Ministry	548	586	591	568	624	675
Non-Line Ministry	360	368	361	457	483	459
II. Transfer to Regions	413	464	470	521	574	643
C. Primary balance	-44	-3	-2	33	81	184
D. Overall balance (A-B)	-151	-126	-124	-108	-66	38
(percent of GDP)	-2.1	-1.5	-1.5	-1.2	-0.6	0.3
E. Net financing	151	126	124	108	66	-38
I. Domestic financing	154	126	126	123	91	-9
II. Foreign financing	-3	0	-2	-15	-25	-29

Sources: Ministry of Finance

2. The BPJS Law and the transformation of Indonesia's social security structure

The recent passage of the Law on the Social Security Administrative Body, or BPJS Law, is an important stage in moving towards a new, comprehensive social security system for Indonesia

On October 28, 2011, Indonesia's Parliament, the DPR, approved a draft law on the Social Security Administrative Body (referred to as the *Badan Penyelenggara Jaminan Sosial* or BPJS Law). This law was then enacted by the President as Law No. 24/2011 on November 25, 2011. Passage of this law marks the end of a long debate regarding the administration of the five national social security programs created by the National Social Security System Law No. 40/2004 (the *Sistem Jaminan Sosial Nasional* or SJSN Law) and clears the way for the design and implementation of a new social security system that will eventually cover all Indonesians. Given its importance, this section provides a brief overview of the new BPJS law, its background, content and some potential issues for its implementation.

a. Current social insurance programs are fragmented and with limited coverage

The 2004 National Social Security Law created five separate social insurance funds with universal coverage and the same benefits for all...

The SJSN law was enacted in 2004 and its provisions, when fully implemented, will radically transform the structure of social security in Indonesia. It created five separate social security funds (SSF) – health, worker accident, pension, old-age savings and death benefits – covering all Indonesians. The programs will cover formal and informal sector workers and provide the same benefits for all. Social insurance funds will collect contributions from workers, employers and the government in order to finance promised benefits. Formal sector workers and their employers will make contributions as a percent of wages, informal sector workers will contribute a flat amount in rupiah and the government will make contributions for the poor that will also be a flat amount in rupiah. A new type of public legal entity referred to as a BPJS will administer these programs and manage the social insurance funds.

...contrasting with the current social insurance programs which cover only a fraction of the population and vary across labor market groups

To understand the significance of the BPJS law, it is first necessary to understand the structure of social insurance programs in Indonesia today (Figure 20). Current programs cover only a fraction of the Indonesian population and benefits, contribution schemes and administration vary by labor market group. All programs are mandatory and the administrators are for-profit state-owned enterprises (*Persero*) that report to the Ministry of state-owned enterprises (*BUMN*). These organizations pay taxes and dividends to the Government, though the requirement for both has recently been suspended by regulation.

There are different benefit schemes and administrative bodies for civil servants and the military...

Civil servant retirement programs are administered by *PT Taspen*. They have a defined benefit pension program that includes disability and survivor benefits and an endowment insurance program that provides pre- and post-retirement life insurance benefits and a lump-sum at retirement. The health program for civil servants is administered by *PT Askes*. The military has similar retirement programs administered by *PT Asabri*. However, the health program is administered by special units under the Ministry of Defense, the military and the police rather than by *PT Askes*.

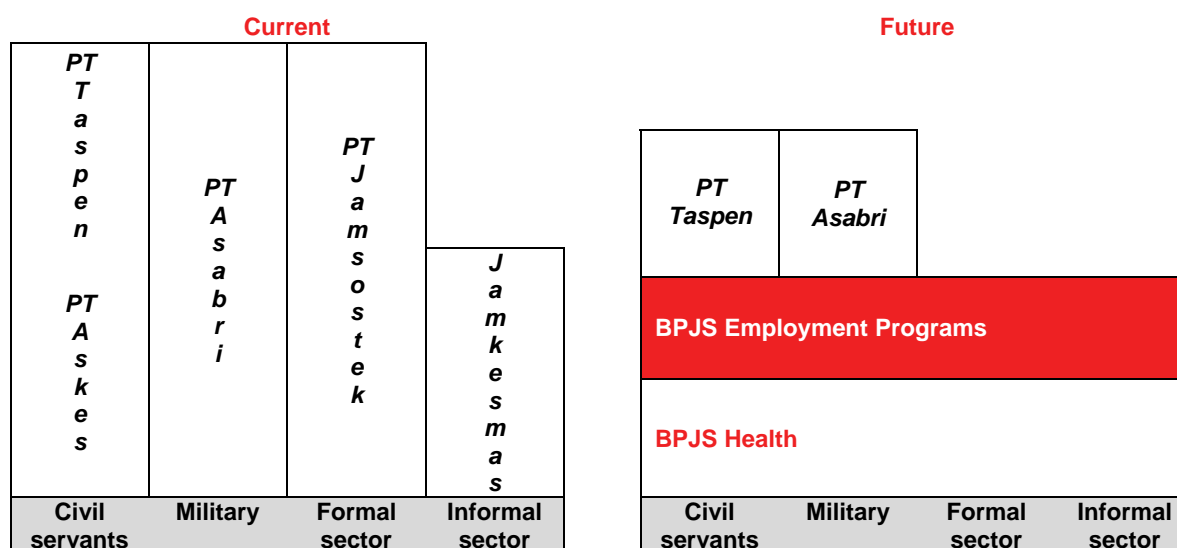
...the programs for formal sector workers are dealt with by another separate body...

Formal sector worker programs are administered by *PT Jamsostek*. There are four programs – old-age savings, death benefits, worker accident and health insurance. Although participation in the programs is mandatory, evasion is very high. Out of approximately 33 million eligible workers, only about 9 million are actively contributing. The *PT Jamsostek* health program has even fewer participants because employers are permitted to opt-out as long as they establish a health program with equal or better benefits. Consequently, only about 2 million workers and their families participate in *PT Jamsostek's* health program.

...and there is the Jamkesmas health insurance for the poor and near-poor

Finally, the Government has established a health insurance program for the poor and near-poor referred to as *Jamkesmas* (see the evaluation in Part B of the December 2010 *IEQ*). This program is tax-financed and provides free health services at public facilities to eligible members. Some administrative services for this program are provided by *PT Askes*, and prior to 2008, the program was operated on a social insurance basis by *PT Askes*. Some local governments have also established health programs referred to as *Jamkesda*. The coverage and benefits provided by *Jamkesda* varies widely by location.

Figure 20: Under the new social security structure benefits will be organized by program rather than by type of worker



Source: World Bank staff

b. The BPJS law sets out the administration of future social security programs

The SJSN Law required the establishment of social security administrative body (BPJS) to administer its new programs...

Since the SJSN law was enacted in 2004, one of the areas of controversy has been who would administer the new programs that it created. In particular, the SJSN law contains several requirements with regard to the administration of the five new programs.

Article 5(1) states that the social security administrative body (BPJS) must be established by law. Article 5(2) then indicates that the existing administrators will be declared BPJS on the date of enactment of the SJSN law while Article 5(3) states that the BPJS will be the four existing social insurance administrators. However, further complicating efforts to establish the BPJS was the 2005 Constitutional Court Decision (No. 007/PUU-III/2005), which ruled that Article 5(2) and 5(3) were invalid. Finally, Article 52 of the SJSN Law states that the administrators must be adjusted to the requirements of the SJSN law within five years. This October 2009 deadline was missed.

...and there was opposition to reform from existing administrators

The four existing program administrators expressed concerns about the idea of merging the four administrators (*Taspen*, *Asabri*, *Jamsostek* and *Askes*) into one and to changing the legal structure from a state-owned enterprise to a not-for-profit public legal entity. Each of the administrators preferred to maintain control of its assets, programs and membership. The issue of the administrators overshadowed efforts to focus on the design and financing of the new benefit programs and became one of the main obstacles to SJSN implementation.

But, the draft BPJS Law was finally approved by the DPR in October 2011

In late 2010, the DPR renewed efforts for the implementation of the SJSN law by drafting a law on administrators. The President then appointed an 8-Minister group led by the Minister of Finance to work with the Parliament on the draft law. After one year of intensive effort, the BPJS law was finally approved by the DPR in October 2011. Key provisions in the law relate to the transformation of the current administrators into BPJS, the governance structures of the BPJS, the distinction between the assets of social security funds and the assets of the BPJS and the responsibilities of the BPJS.

Under the Law, the BPJS will be public legal entities, and no longer for profit state-owned enterprises...

The BPJS will be a public legal entity that is responsible to the President. One of the important changes relative to the previous bodies is that the BPJS will not be perseros, i.e. for-profit state-owned enterprises, and the Ministry of State-Owned Enterprises will no longer be responsible for supervising their activities. This brings Indonesia into compliance with established international practice. Social insurance programs should not be a profit center for the government. Rather they should be established to protect citizens against financial and macroeconomic risk.

...and will be established by transforming the existing administrators

The Law mandates the establishment of two BPJS – BPJS Health and BPJS Employment. BPJS Health will manage the SJSN health insurance fund only and will be established by transforming *PT Askes*. The health programs currently managed by *Askes* and *Jamsostek*, the *Jamkesda* program and the *Jamkesmas* program managed by the Ministry of Health will all be transferred to BPJS Health. The legal transformation must take place by January 1, 2014 and all the other health programs will cease on that date. BPJS Employment will be established by transforming *PT Jamsostek*. This BPJS will manage work accidents, death benefits, pensions and old-age savings funds. The transformation must also take place by January 1, 2014, but the four SJSN programs have until July 1, 2015 to begin operations. Prior to that time, BPJS Employment will manage the programs formerly administered by *PT Jamsostek*.

PT Taspen and *PT Asabri*, i.e. the civil servant and military disability and survivor benefits and endowment insurance programs, will be transformed much later, prior to 2029. In many countries, civil servants and the military have separate programs from the rest of the population and Indonesia will need more time to integrate these groups into the national social security system.

There was long debate about whether there should be one, two or four administrators for the SJSN programs. In the end, the government decided to establish two BPJS. The government did not want to create a monopoly by putting all programs under one administrator. They also wanted to separate the insurance programs from the retirement programs as the two have different risk profiles and require different skill sets for effective management. However, in the end they decided to consolidate the various health programs under one BPJS and leave the other programs with the second BPJS. *Jamsostek* already manages worker accidents, death benefits and old-age savings programs today and it was logical to put the pension program with this BPJS as well.

In establishing the BPJS, the assets, liabilities, employees, rights and obligations of the current administrators will be transferred to the BPJS. The government will also pay in initial capital of not more than IDR 2 trillion for each of the BPJS.

The BPJS Law also sets out the governance structures of the new bodies

The BPJS Law sets out a governance structure with a typical two Board set-up. The Board of Commissioners will consist of seven members including two government representatives, two employee representatives, two employer representatives and one public figure. The Board of Directors will consist of at least five members selected on the basis of professional qualifications.

A selection Committee will recommend candidates for both Boards to the President. The President must submit two candidates for each position for the non-government members of the Board of Commissioners to the DPR and the DPR selects the members. For candidates for the government members of the Board of Commissioners and for all members of the Board of Directors, the President makes the final selection. Members of both Boards serve 5-year terms and can be nominated for a second 5-year term. For the first two years, the Boards of the BPJS will be the same as the Boards of *Askes* and *Jamsostek*.

There will be internal and external supervision of BPJS activities. The organizations will be supervised internally by the Board of Commissioners and an internal audit department. In addition, they will be supervised externally by the National Social Security Council (DJSN), the new Financial Services Authority (OJK) and the State Financial Audit Board. The BPJS must also establish a quality control unit to handle complaints and must respond to complaints within specified time periods.

The assets of the BPJS, will be kept separate to those of the social security funds which it administers

The BPJS law improves the legal and financial structure of the social insurance system by legally separating the assets of BPJS from the assets in the social security funds. The government must first decide on the benefits to be provided under each of the five programs and the required contribution rates. These contributions should be sufficient to fully pay for all benefits and administrative costs for that program. No cross-subsidies among social security funds are permitted.

The government is required to formulate and implement policies to ensure the soundness of the funds and program continuity. These policies could include changes in benefit levels, contributions and retirement ages, as a last resort. Although the law does not explicitly state that the government is legally obligated to ensure fund solvency the law implies this obligation, and in practice, political and moral considerations almost always produce this result. It is certainly in the Government's best interest to implement effective risk management policies to assure contributions are sufficient to pay promised benefits and the funds remain solvent.

Contributions from employers, workers and the government and investment income on those contributions will be placed in the appropriate SSF. These assets can only be used to pay benefits to participants and pay for administrative expenses. The assets in these funds are managed by the BPJS but do not belong to the BPJS. SSF assets will be held at the State-owned custody bank.

The BPJS assets come from several sources – paid-in capital from the government, assets transferred from *PT Askes* and *PT Jamsostek*, and fees charged by BPJS to the SSF for its administrative services. The BPJS can charge fees as a percent of contributions and/or as a percent of investment income to cover its administrative costs for each of the five programs. This is similar to the structure of Indonesia's mutual funds and private pension funds.

The separation of administrator and fund assets in different legal entities and the use of a custodian to hold fund assets are important safeguards for fund members and are consistent with international best practice. In theory, this assures that BPJS creditors cannot seize fund assets, keeps the BPJS from having direct control of the assets that belong to members, and allows the custodian bank to review the financial transactions requested by the BPJS to assure they comply with the law. Additional regulations will be needed to assure the system operates as intended.

The BPJS responsibilities will include registration, assigning identification numbers, collection of contributions and application of sanctions to non-payers, processing of claims, verification, monitoring and reporting

The responsibilities of the BPJS as set out in the Law include the registration of employers and workers (in both the formal and informal sectors) and the assignment of individual identification numbers to all members. The BPJS will also be responsible for collecting contributions in cooperation with other government agencies, local government and state-owned enterprises (with only public organizations allowed to be involved in the collection of contributions). For those who don't pay, the BPJS can apply administrative sanctions, including written warnings, fines and being cut-off from receiving certain public services. The BPJS will maintain systems for verification and monitoring of claimants and benefits and will process claims and make payments to health facilities (BPJS Health) and individuals. It is also required to manage the investment of social security fund assets and establish technical reserves based on standard actuarial practice. Finally, the reporting procedures for BPJS include a requirement to submit to the President both semi-annual reports, and also an annual report by June 30 of the following year (whose executive summary must also be published by the BPJS in the media). The BPJS must also inform participants about their rights and, at least once per year, the benefits they have earned in the pension and old-age savings programs. At all times, the BPJS must operate the social insurance programs in the best interest of the participants.

In addition to the law itself, the associated regulations and decrees will play a key role in determining the future set-up of the BPJS

It is also worth noting that the BPJS law offers general guidance but leaves much of the specifics to regulations, and significant information is contained in the elucidation of the law rather than in the text of the law itself. The BPJS law requires the issuance of 18 separate regulations and/or decrees. All regulations for the health program must be issued within one year of enactment and those for the employment programs within two years.

c. There do however remain areas of concern regarding implementation of the Law

Some of the areas of concern on the implementation of the new BPJS Law relate to governance structures...

While the BPJS report to the President, it is not clear who in the President's office will actually be responsible for supervision and control of BPJS operations. The National Social Security Council, *Dewan Jaminan Sosial Nasional* or DJSN, is responsible for synchronizing the administration of the SJSN system, but it is not clear what their specific functions are. The BPJS law states that DJSN issues a monitoring and evaluation report every 6 months and receives a monitoring and evaluation report from the Board of Commissioners every six months. They also receive a copy of annual reports and accountability reports.

The law also states that the new Financial Services Authority, *Otoritas Jasa Keuangan* or OJK, is responsible for external supervision, but doesn't clarify its functions. Given the huge amounts of money that will flow into the two BPJS and the critical role they play in the social protection system for the country, it is important to have very strong supervision and control to protect the rights of participants and prevent fraud and corruption.

...the collection of contributions...

Another set of concerns relate to the collection of contributions. The first issue is the unnecessary duplication whereby there will be two organizations, BPJS Health and BPJS Employment, charged with collecting contributions from the same employers and individuals. A second issue is the difficulty of making sure that the required contributions are paid. It is good that the BPJS have been given the right to impose administrative sanctions in cases of non-compliance. *Jamsostek* does not have that authority and it has made their enforcement difficult and led to wide-spread evasion. Despite the availability of administrative sanctions, collecting from millions of informal sector workers individually and from micro-enterprises will prove very challenging.

...changes in organizational structure and business processes...

Significant changes in organizational structure, business processes and IT system will also be needed for *PT Askes* and *PT Jamsostek* as they transform from *Perseros* managing programs for a particular labor market segment to BPJS managing nationwide programs. BPJS Health will need to implement a new basic benefit package, contribution scheme, provider network and provider payment scheme as well as absorb the existing three health programs. BPJS Employment will need to implement a new pension program and manage an old-age savings program that will eventually be significantly larger than the existing *Jaminan Hari Tua* (JHT) program that it manages today.

...the issuance of identification numbers...

In order to properly administer the social security programs, it is important to ensure that everyone receives an identification number and that there is no duplication in the issuance of personal identification numbers. The Ministry of Home Affairs is working on an electronic identification program, but the time frame for its roll-out is unclear. It is likely that it will not be ready in time for the start of the SJSN health program. This means the BPJS will likely need to develop a separate ID number solely for the SJSN system. Once again, it doesn't make sense for the two BPJS to separately issue ID numbers. Instead, they must work together to assure that the ID numbers are issued and are unique – everyone has one and only one number.

....and strong Government of Indonesia risk management and BPJS supervision

Finally, it is important for the Government of Indonesia to assure that the financial risks of the social insurance programs are properly managed. If the contribution rates are set too low relative to promised benefits, or if the contributions and/or benefits are not periodically adjusted, or if program funds are mismanaged, the social security funds could become insolvent. This creates a potentially large contingent liability for the State budget, which is the ultimate guarantor of fund solvency. Consequently, the Government has a strong incentive to assure the programs are properly managed. This will require the creation of risk management capability within the government and strong supervision and control of BPJS operations to prevent fraud and corruption, assure proper financial management and control operational expenses.

The enactment of the BPJS law is a significant step in the implementation of a social protection system for all Indonesians. However, much work remains to be done to design the individual programs, calculate appropriate contribution rates and properly manage the governance and financial risks associated with these programs.

C. INDONESIA 2014 AND BEYOND: A SELECTIVE LOOK

1. Indonesia's manufacturing sector: Floating or reviving?

a. From boom to growth recession

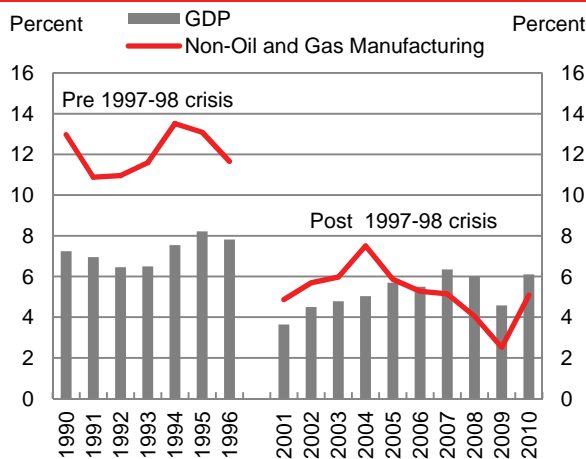
After a very strong performance in the early 1990s, the lower growth rate of manufacturing activities after the economic and political crises of the late 1990s received particular attention...

...with the manufacturing sector recovering more slowly in Indonesia than in other Asian Crisis economies

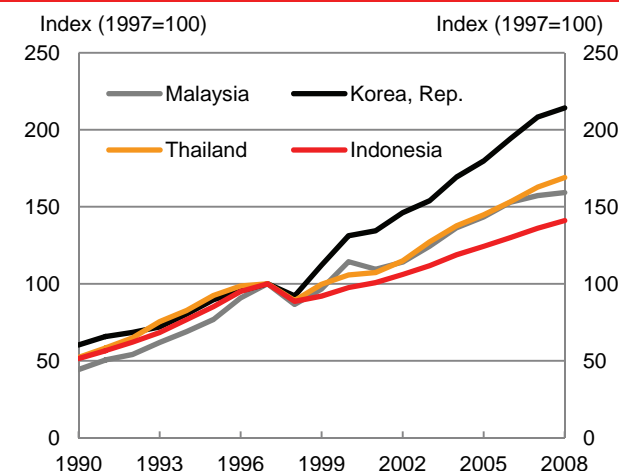
From 1990 to 1996 the growth of Indonesia's manufacturing sector, excluding oil and gas, reached 12 percent per year and contributed one-third of overall real GDP growth (Figure 21). This powerful growth accelerated the transformation of Indonesia from an agrarian to a semi-industrialized economy.⁵ But, after a period of economic and political crises in the late 1990s, manufacturing activities fell into a 'growth recession' and contributed considerably less to GDP growth and high value job creation. More recently, the performance of the sector has picked up, raising the question of whether a revival is underway. Given the importance of the manufacturing sector for the economy's labor and growth dynamics, this section analyzes these medium- and near-term trends and considers how addressing current constraints on the sector could allow it to strengthen its contribution to Indonesia's development going forward.

Indonesia was one of East Asia's emerging "dragons" with a manufacturing sector growing as fast as in Malaysia, Korea, and Thailand. From the mid-1980s through to the mid-1990s, the pace of development in Indonesia's manufacturing sector was similar to that in Malaysia and Thailand as these countries embraced export-oriented growth strategies as a means to transform their economies. Although adversely affected by the Asian crisis of the late 1990s, Figure 22 demonstrates that the manufacturing sector in other East Asian countries suffered from one to two years of recession and then quickly picked up their previous growth paths. However, since 1998, Indonesia's manufacturing sector has not only been following a lower growth path compared to pre-crisis, but its growth has also increasingly lagged behind its Asian peers.

Figure 21: After boom years in the early 1990s Indonesia's manufacturing sector has been growing much more slowly (growth rate of real GDP, percent) **Figure 22: Indonesia's manufacturing sector has recovered more slowly from the Asian crisis than regional peers (manufacturing real GDP, 1997=100)**



Sources: BPS and World Bank staff calculations



Sources: World Bank World Development Indicators (WDI) and World Bank staff calculations

⁵ Hill, H., 1995, "The Indonesian Economy Since 1966: Southeast Asia's Emerging Giant", Cambridge University Press.

Declining output growth was seen in almost all sub-categories of manufacturing activities

Compared to the early 1990s, Indonesia's manufacturing output growth since the Asian crisis has declined in almost all major sub-sectors (Figure 23). The decline in output growth was severe in sub-sectors that had been export-driven, such as textiles, clothing and footwear (TCF) and wood products. Lower domestic demand after a sharp contraction in GDP of 14 percent in 1998 and a deteriorating business environment in the years following the Asian crisis were also to blame.⁶ Nevertheless, the subsequent strength of domestic demand helped several sub-sectors to keep growing, albeit at a lower rate.

After ten years of strong performance, manufacturing export growth started to weaken after the Asian Crisis

Export growth of manufacturing has also declined since the mid 1980s. The growth rate of exports of non-oil manufacturing products reached 29 percent per year over 1985-1990 and 21 percent between 1990 and 1995, mostly driven by TCF products. Manufacturing exports did not collapse completely during the Asian crisis because the sharp devaluation of the Rupiah provided an incentive for surviving firms, particularly in textiles, garments, and furniture, to focus on export markets.⁷ From 1996 to 2000 manufacturing exports still grew by 8.8 percent per year, before falling further to 5.1 percent over 2001-2005. These trends reflect a loss in export competitiveness, in particular in garments and footwear which made up 31 percent of manufacturing exports in the early 1990s (Figure 24).

Figure 23: Except for transport equipment, output growth in all manufacturing sub-sectors has declined
(average annual growth of real value added, percent)

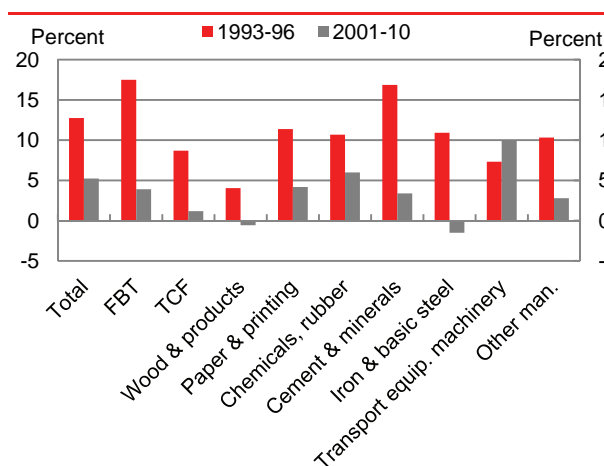
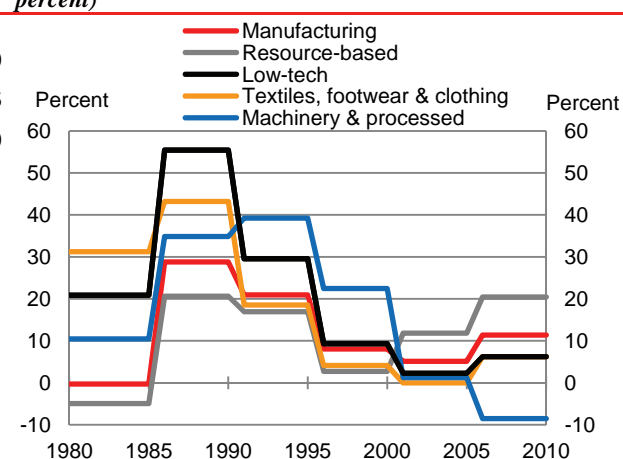


Figure 24: Growth in the value of manufacturing exports has declined, except for resource-based products
(average annual growth of real value added over 5 years, percent)



Note: FBT is food, beverages and tobacco. Cement & Sources: BPS and World Bank staff calculations
minerals include only non-metal minerals
Sources: BPS and World Bank staff calculations

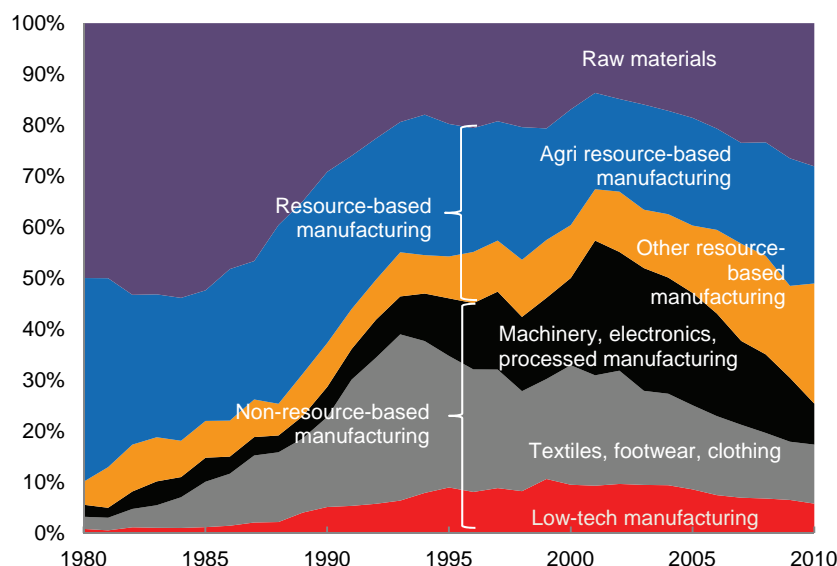
Rising commodity prices resulted in Indonesia's exports shifting towards commodities and resource-based manufactures

Exports of resource-based manufactures, such as rubber and palm oil, increased significantly as a result of the boom in global commodity prices that took place between 2003 and 2008. The share of resource-based products in total non-oil and gas exports rose from 34 percent in 1995 to 47 percent in 2010 (Figure 25). The increase in resource-based manufacturing exports occurred at the expense of other manufacturing products, namely TCF, machinery and processed products (such as electronics, with the exception of automotive parts); and low technology products (such as base metal and steel). The share of TCF in non-oil and gas exports declined from 24 percent in 1995 to only 11 percent in 2008.

⁶ Aswicahyono, H., Hill, H. and Narjoko, D., 2010, Industrialization after a deep economic crisis: Indonesia, *Journal of Development Studies*, 46(6):1084–1108.

⁷ Wie, T.K., 2000, The impact of the economic crisis on Indonesia's manufacturing sector, *The Developing Economies*, XXXVIII(4):420–53.

Figure 25: Manufacturing exports have shifted towards resource-based products
(share of Indonesia's non-oil exports, percent)



Sources: BPS and World Bank staff calculations

b. What factors explain Indonesia's recent manufacturing sector performance?

The major micro level constraints on growth and investment vary across different types of manufacturing firm

Firm-level surveys can help to provide a diagnosis of the major constraints that may be impeding the activity of firms within Indonesia's manufacturing sector. Findings from World Bank's 2009 Enterprise Survey suggest that there is a large variation in these constraints when looking across different types of manufacturing firms (Figure 26).

For example, small manufacturers (i.e. those with 5-19 employees) consider access to finance and informal practices in business competition as severe constraints for their operations. Poor credit information and uncertainty in enforcing contracts are likely to cause high costs for small manufactures in getting credit, particularly for investment loans. To a large extent these findings are also consistent with World Bank's 2012 Doing Business report in which Indonesia was ranked 126 out of 183 economies in terms of business access to credit. Compared to other major economies in East Asia, Indonesia still does not have a well functioning private credit bureau as an information exchange and sorting mechanism for lenders. Legal rights to protect borrowers and lenders in loan agreements in Indonesia are also perceived as the weakest in the region.

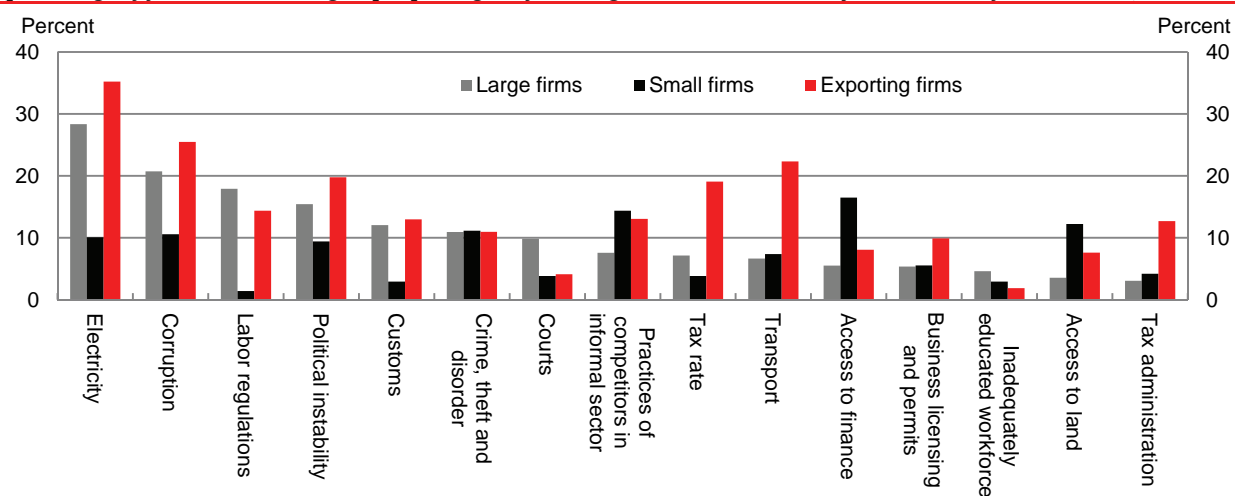
Meanwhile large manufacturers with at least 100 employees are more concerned about the quality of electricity, corruption, and labor regulations. Exporters are also more concerned about the quality of electricity, corruption, and transport infrastructure. Disruption and unreliable infrastructure are costly for exporters and large manufactures because they are more likely to spend more on electricity usage and rely on transportation in their operation. Concerns over infrastructure also reflect the fact that Indonesia's logistics performance ranks relatively low compared to regional peers.

Nevertheless, the findings confirm that "business risks" appear to affect manufacturing activities in Indonesia

To a large extent the above examples are consistent with a previous World Bank report that highlighted that "risk elements" such as labor market disruption and uncertainty in regulations have the largest negative impact on the productivity of manufacturing firms.⁸ Because uncertainty entails difficulties in assessing the outcome of business decisions, riskier scenarios can affect negatively manufacturers' incentives and result in delayed investments or shorter and smaller investment projects.

⁸ World Bank, 2005 "Raising Investment in Indonesia: A Second Generation of Reforms".

Figure 26: The major constraints on business vary across the type of firms within Indonesia's manufacturing sector (percentage of firms within each group reporting the following issues as severe or major constraints for businesses)



Sources: World Bank Enterprise Survey (2009) and World Bank staff calculations

Box 4: How do exports of manufactured goods respond to macro-economic incentives?

Recent analytical work carried out by the World Bank looks at the impact that macroeconomic incentives have had on manufacturing exports based on trade and output data for 16 sub-sectors over 1990-2008. The results show that exporters take time to respond to price incentives, and have been affected by labor costs rising beyond productivity levels, non-tradable price increases, and by exchange rate uncertainty.

The analysis finds that exporters respond to price incentives, but they take time to adjust. A 1 percent increase in export prices has a short-run positive effect on quantities exported of about 0.6-0.7 percent, on average, which increases to 1 percent in the long run. This is because expansions typically imply finding new markets – which takes time –, but also because supply constraints in Indonesia may be preventing fast output adjustments. For example, as shown in Figure 26, 35 percent of exporting firms pointed to electricity supply as a severe obstacle to their business and 22 percent cited transport.

The rise in unit labor costs of 8 percent per annum over the period induced an average reduction in export growth rates of 1.6 percentage points per annum. Increases in the wage bill above labor productivity growth by 1 percent are associated with falls in exports by, on average, 0.2 percent. Similar results are found using dollar wages per worker rather than unit labor costs. The sensitivity of exports to labor costs is relatively low. Still, the sharp and heterogeneous increases in labor costs across sectors seem to have affected sectoral export growth to different extents. Interestingly, exports in sectors that use labor intensively are not responsive to unit labor costs. It is possible that these sectors in which labor is a key input, have institutional arrangements – such as flexible labor contracts – that help insulate them from these cost variations.

As mentioned above, the increase in the prices of non-tradables has limited the scope for export growth. Non-tradable prices capture the evolution of the non-wage costs faced by firms. In addition, increases in non-tradable prices induce a re-allocation of resources away from manufacturing, affecting export capacity. Results suggest that every 1 percent increase in non-tradable prices is associated with a fall in export quantities on average by 0.55 to 0.75 percent.

Finally, the analysis also points, as expected, to the positive relationship between a stable, predictable nominal exchange rate and the growth of exports. Exchange rate volatility increases the degree of uncertainty faced by exporters, and induces them to postpone investment plans, and to disengage from risky activities. Indeed, it is found that a 1 percent increase in exchange rate volatility is associated with a fall in exports by 0.04 percent on average, everything else being held constant.

A shifting macro-economic environment, such as in the relative prices of tradables and non-tradables, has also had an impact on manufacturing operations in Indonesia

In addition to the above micro-level factors, macro-economic trends are also important influences on the activities of manufacturing firms (Box 4). For example, the decline in relative prices for non-resource-based manufactured products was one of the drivers of falling profit margins for manufactures. This decline is explained by the combination of a reduction in growth in output prices and a rapid increase in the price of non-tradable products, such as services.

On the one hand, slower growth of manufactured prices, beginning in the late 1990s-early 2000s, coincided with more competitive pressure in the international market as other countries increased their world export market shares relative to Indonesia. A more competitive environment implies that firms are constrained in their ability to set prices, and

instead have to take them as given. In fact, output prices for Indonesian exporters grew, on average, by 17 percent less than for non-exporters over 1998-2008. In addition, those sectors oriented to domestic markets, but facing import-competition, also experienced slower growth in output prices. An analysis of determinants of manufacturing output prices suggests that an increase in import penetration of 10 percent would reduce the growth rate of output prices by 2.5 percent.⁹ On the other hand, in 2000 - 2010 the prices of non-tradables in Indonesia rose more than threefold. The sustained increase in prices of non-tradables are likely due to a combination of more than a decade of sustained growth (that strained existing infrastructure and triggered cost-push forces) and a commodity price boom. The relative increase in the prices of non-tradables to prices of tradables is reflected in the real effective exchange rate that appreciated by about 42 percent from 2000 to 2010.

c. Are we seeing renewed opportunities for Indonesia's manufacturing sector?

There are reasons for optimism for the future performance of Indonesia's manufacturing sector...

Despite the adverse context highlighted above in which the Indonesian manufacturing sector has operated over the last decade, there are reasons to be optimistic about its future performance. Favorable demographics and a rapidly growing middle class (as described in the March 2011 *IEQ*) are attracting investment by 'market-seeking' firms of both domestic and foreign origins. These long-term trends have been further stimulated by a relative short-run advantage that lower labor costs in Indonesia give Indonesian manufacturers relative to those in other Asian countries - in particular in India and in China, where wages have been growing rapidly in the last few years.

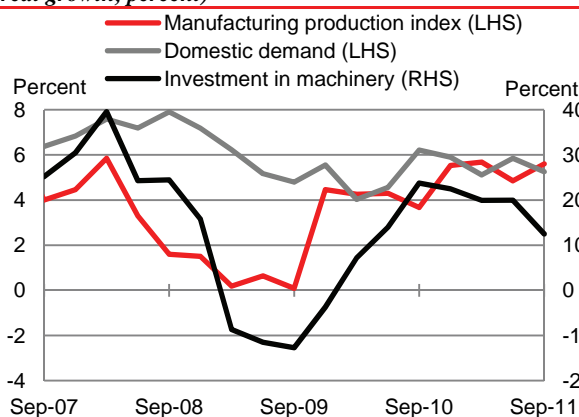
Activity has picked up strongly recently...

After a dip in growth during the fallout of the global financial crisis, output growth among medium- and large-scale manufacturing firms increased by 5.6 percent year-on-year in the third quarter of 2011 (Figure 27). The main drivers of the increase were the chemicals sector, which grew by 19.8 percent year-on-year, basic metals, which grew by 14.2 percent, and automotive machines and parts which experienced the highest growth of 29.8 percent (Figure 28).

Recent increases in investments in machinery are also a reflection of strong growth in the manufacturing sector, together with growth in other sectors (natural resources, services). Investment in machinery has recovered quickly after the global financial crisis of 2008-2009, reaching growth of 17 percent year-on-year during the first three quarters of 2011.

Figure 27: Manufacturing activities have shown strong growth in recent quarters...

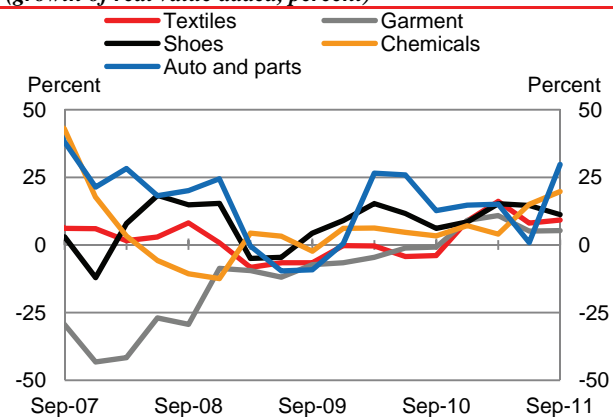
(real growth, percent)



Sources: BPS and World Bank staff calculations

Figure 28: ...with non resource-based manufacturing activities also growing

(growth of real value added, percent)



Sources: CEIC and World Bank staff calculations

⁹ This result emerges from an examination of the evolution and determinants of 32,000 firms' profit margins and output prices during the post-crisis period (1998-2008), using Indonesia's manufacturing census data.

...buoyed by the recovery in commodity prices from 2009 through mid-2011...

Through to mid-2011 global commodity prices recovered strong from their bust at the end of 2008 and early 2009. This boosted the value of exports of resource-based products, whose growth rate increased to 43 percent and 67 percent year-on-year in the first and second quarter of 2011 respectively. Meanwhile, the recent strong increase of non resource-based exports could suggest buyers' confidence in sourcing products from manufacturers in Indonesia and increasing costs of production in other countries. The export value of chemicals increased by 45 percent year-on-year in the first half of 2011 due to increasing demand for synthetic fiber (see Box 5). Exports of TCF grew 27 percent year-on-year in the first half of 2011 and likely in part reflected buyers diversifying their purchases and the relocation of relevant manufacturing industries from China, as discussed below. Meanwhile, increases in exports of machinery were primarily driven by increased exports of automotive parts as Indonesia is becoming an important regional player in the automotive sector.

...but also supported by Indonesia's robust domestic demand...

The importance of domestic demand has increased in most manufacturing activities in Indonesia. Domestic demand demonstrated remarkable resilience during recent periods of weaker external environment (Figure 27) and grew by 5.4 percent in the first three quarters of 2011 year-on-year. Sustained growth in domestic demand has contributed to strong growth in the production of basic metal, food, chemicals, and automotive parts as the domestic market dominates demand in these industries.

...which may be reflected in a shift in the market orientation of Indonesian manufacturing firms

But the increasing role of domestic demand could also be a reflection of shifting market orientation among manufacturing firms in Indonesia. Declining international competitiveness and the attractiveness of Indonesia's fast growing domestic market could be behind the shift in market orientation, combined with the severe global recession following the global financial crisis. Between 2002-2004 and 2007-2009 the share of manufacturing firms who were exporters (i.e. exported at least 10 percent of their output either directly or indirectly) declined from 14.4 percent to 11.6 percent while the average share of exported output declined from 18.3 percent to 15.9 percent (Table 8). The share of exporting firms declined significantly in TCF from 13.4 percent of firms in 2002-2004 to 8.3 percent in 2007-2009. Meanwhile, the role of exports seems to have increased in the machinery and automotive industries.

Table 8: Shift in market orientation among Indonesian manufacturers

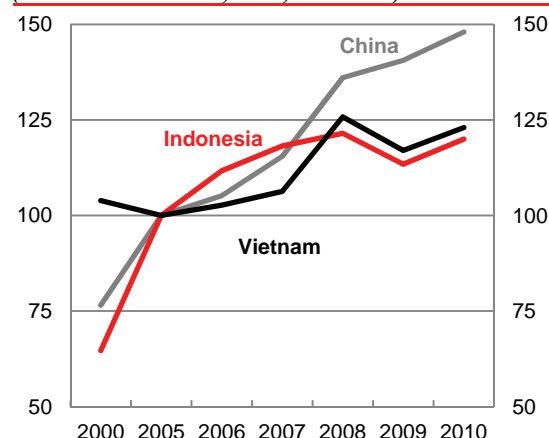
Sub-sector	Exporting firms (percent of total number of firms)			Average output exported (percent of total output)		
	1994-96	2002-04	2007-09	1994-96	2002-04	2007-09
Food, beverages	9.7	8.2	7.1	20.9	13.9	11.8
Textiles, clothing, footwear	18.6	13.4	8.3	39.1	24.6	25.3
Wood and wood products	36.7	33.9	27.7	69.9	48.8	39.4
Paper & printing	6.3	3.5	3.5	11.6	12.2	17.6
Chemicals, rubbers	17.1	12.6	11.7	23.4	19.3	16.9
Minerals, non-ferrous metal	3.9	7.2	5.3	8.7	14.9	7.3
Basic & fabricated metal	11.1	9.4	8.8	18.5	12.0	13.6
Machinery & electronics	24.4	11.2	13.8	21.2	16.5	22.4
Automotive industry	8.1	5.8	7.7	5.4	7.3	6.4
Others	37.0	38.9	31.6	45.2	37.0	30.3
Total	16.5	14.4	11.6	27.3	18.3	15.9

Sources: World Bank staff calculations from Census of Medium-Large Manufacturers

Manufacturing activities in Indonesia are also likely to be boosted from investment from firms that are relocating to Indonesia

Recent reports suggest increasing foreign investment in Indonesia's manufacturing sector to serve domestic and export markets. Media reports have highlighted that increasing wages in China, particularly in industrial cities, have triggered firms in labor intensive industries, such as TCF, to relocate to Cambodia and Indonesia. Indonesia's unit labor cost index in US dollars only increased moderately between 2000 and 2010 (Figure 29). China's wages are estimated to have increased significantly faster, particularly in industrial areas of the Pearl River Delta and the Yang Tze River.

Figure 29: Indonesia average wages in recent years have come in below those in China and Vietnam (unit labor cost index, USD, 2005=100)



Source: Economist Intelligence Unit, 2010, and World Bank staff calculations

Once operational, such firms relocating to Indonesia are also likely to play an important role in driving exports of TCF products. Japanese automotive makers are also expected to significantly increase their presence in Indonesia as Japanese manufacturing firms develop new supplier networks. Recent BKPM data suggest that in the third quarter of 2011 the realization of foreign investment in manufacturing activities in Indonesia reached USD 5.2 billion or a 107 percent increase year-on-year, the strongest increase in the past 5 years. Recent BKPM data also suggest a significant increase in foreign investment in TCF and the machinery and electronics industries.

Box 5: Recent manufacturing pick up due to strong domestic demand and favorable international developments

Indonesia's automotive industry is now one of the key sectors driving manufacturing. Many factors have contributed to this, not least of which being that Indonesia will soon become the largest car market in ASEAN, as well as already being the world's third largest motorcycle market (according to press reports from Japanese motorcycle producer Honda).^a The domestic market has been the main attraction for car producers, although modest tax incentives have also contributed to growth of the sector in Indonesia. Events in other countries in the region (such as political unrest or natural disasters) have also served to enhance Indonesia's attractiveness as an investment destination for the automotive industry, as reflected by recent announcements of large investments by Astra Daihatsu, Toyota, Hyundai, and many other brands. What is more interesting is also the significant investments that are being made not only in assembly but also research and development facilities (since, as discussed in the subsequent section, R&D and particularly private sector R&D has been relatively low in Indonesia compared to regional peers).

Chemicals, textiles and garments are also contributing to the recent pick up in manufacturing activity. The increase in output of the chemical industry has been driven by the increasing demand for fiber products. Growth in the chemical industry, at almost 20 percent, is just below growth in the automotive sector. Indonesia's chemical industry has a ready supply of petrochemical derivatives such as purified terephthalic acid, and its synthetic fiber producers are well positioned to serve the global textile industry's appetite for materials such as polyester and rayon. The rise in global cotton prices by nearly 100 percent over 2010 to a 15 year high has shifted the demand of global and local garment producers towards synthetic fibers. Global consumption of synthetic staple fibers rose by 6 percent in 2010 while synthetic filament fibers rose by 8 percent. Meanwhile, textile and garment output followed with 9.3 percent and 5.3 percent growth year-on-year, respectively.

Note: ^a See <http://search.japantimes.co.jp/cgi-bin/nb20081008a2.html> and <http://sg.news.yahoo.com/honda-vietnam-build-third-motorbike-plant-140837582.html>

d. Sustaining development by expanding opportunities for manufacturing growth

Indonesia can strengthen its development progress by sustaining growth in its manufacturing sector

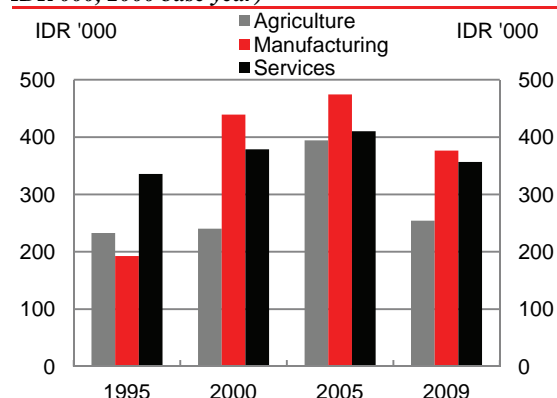
Within a resource rich economy such as Indonesia, the manufacturing sector has a key role to play in diversifying production, providing productive job opportunities and driving economy-wide improvements in productivity. Excessive concentration on resource-based extractive or manufacturing sectors can increase the exposure of an economy to the costly boom-and-bust cycles associated with commodity prices, leading to more volatile growth. As mentioned, Indonesia's exports are largely dominated by natural resource-based commodities, particularly agriculture commodities and mining and mineral. Recent empirical work argues that economies which show such a comparative advantage in the

production of primary products are disadvantaged in the sense that development in natural resource sectors tends to be associated with less growth and economy-wide productivity gains than development in manufacturing industries.¹⁰ The key point is that natural resources usually cannot generate significant employment, unlike manufacturing industries and related services. Even though these enclave sectors typically operate at very high productivity levels, they cannot absorb the surplus labor from agriculture.

Growth in manufacturing activities could increase the availability of high value jobs in Indonesia

Sustaining growth in manufacturing sector helps Indonesia create more jobs, particularly high value jobs that can raise living standards and provide productive employment for the growing labor force. With about 1.5 million new entrants into the labor force every year, a robust and expanding manufacturing sector is an essential source of formal jobs with relatively stable increases in income. Real monthly wages (in 2000 prices) in the manufacturing sector, which are higher on average than those in services, increased from IDR 154,000 per month in 1995 to IDR 469,000 in 2009. Furthermore, within the labor force the share with secondary education is rising, from 12 percent in 1995 to 22 percent in 2009, and it is expected that this group could become the main driver of Indonesia's labor force in the near future. For secondary graduates, manufacturing also offers the highest level of real wages with wages doubling from IDR 193,000 in 1995 to IDR 376,000 in 2009 in 2000 prices (Figure 30).

Figure 30: Manufacturing creates high value jobs
(real monthly wages for secondary graduates by sector, IDR '000, 2000 base year)



Sources: Employment Census, 1995-2009, and World Bank staff calculations

Further improving the sustainability of the growth in manufacturing relies on policies and investments that aim at relaxing some of the existing constraints on firms...

The above-mentioned survey of the major investment climate concerns of manufacturing firms provides a guide to policy reforms and investments which could facilitate further growth of the sector. In addition, in order to facilitate long term growth, policymakers can also address other factors, such as the quality of education of the labor force or support for innovation, which can increase the incentives to innovate and improve firms' capacities to absorb knowledge to which they are exposed through their international activities (see Box 6)

...and while there is no one-size-fits-all policy, there are potential quick wins

Policy changes addressing the investment climate in Indonesia may not benefit all firms equally. Better electricity and reduced corruption would meet the needs of large, medium-sized and exporting, while better access to finance and more regulation of practices of competitors in the informal sector is expected to benefit rather small, domestic, and non-exporting firms. Analogously, better transportation and more efficient customs will benefit most firms but particularly exporting and foreign firms, while a more efficient tax administration and better access to skilled labor would in particular address foreign firms' concerns, to name some examples. Changes in labor regulation policy would address a major concern of large and exporting firms and – to a lesser extent – also medium-sized firms, i.e. firms that absorb the largest share of the manufacturing workforce. In contrast, small firms – which make up around 90 percent of all manufacturing firms in Indonesia – consider labor regulations their least important constraint. Facilitating access to land would be most beneficial for small, domestic, and non-exporting firms, conversely, access to land ranks low in the list of business constraints for large, exporting and foreign firms. Policy makers need to focus on issues that promise to improve the investment climate for a wide range of firms.

¹⁰ McMillan, M. and D. Rodrik, 2011, Globalization, Structural Change and Productivity Growth, *NBER Working Paper No. 17143*.

Box 6: An improved investment climate can increase the productivity gains from foreign R&D spillovers

As discussed in the following section, Indonesia has the lowest level of research and development expenditures to GDP in the region. While this has a direct bearing on Indonesia's capacity to innovate, greater integration with the world economy also brings the potential for the economy to benefit from the worldwide stock of available knowledge. This transfer of knowledge through trade can come through a variety of channels, such as importing a larger variety of intermediate products and capital equipment embodying foreign knowledge, and by acquiring information, otherwise costly to obtain. This is in addition to other means of accessing the stock of available foreign knowledge through foreign direct investment, international migration and cross-border information flows.

Recent empirical work for OECD economies has found that the level of education of the labor force, the investment climate, and the quality of the judicial system play an important role in determining the extent to which exposure to foreign R&D results in aggregate productivity gains for the domestic economy (Coe et al, 2009). Similarly, in Indonesia, firms with highly educated employees have been found to adopt more technology than others (Blalock and Gertler, 2009). The investment climate matters because adopting technologies involves costly resource reallocation, the lower these costs are, the easier it is for firms to innovate. A more effective and reliable judicial system is also important: The existence of enforceable contracts irrespective of economic activity or location facilitates capital to be reorganized or reassigned to different purposes, thus making technology adoption easier.

To give a rough idea of the importance of these factors for East Asian countries, the results of the above analysis can be used to explore how much of aggregate total factor productivity (TFP), i.e. the efficiency with which inputs are used in production, is explained by own R&D capital stocks and how much is explained by spillover exposure to foreign R&D via trade. Simulation exercises can then examine the extent to which improvements in the quality of education or investment climate could increase the size of these spillovers.

Looking at the productivity gains from domestic R&D, other countries in the region, such as China, Korea and India are obtaining much higher productivity gains than Indonesia, due to substantially larger R&D capital stocks (Figure 31). Exposure through international trade to the foreign stock of knowledge can provide an extra boost to Indonesia's aggregate productivity level, estimated at about 25 percent of the effects attributable to its own R&D capital stocks. To obtain these estimates, the framework of Coe et al is applied to take into account the R&D capital stock of Indonesia's trading partners, Indonesia's trade exposure to these partners, and the economy's capabilities to absorb knowledge - the quality of education and investment climate. We then compare this contribution to that of Indonesia's own R&D stocks. In contrast, Korea, with better capacities to absorb foreign knowledge enjoys productivity gains due to foreign R&D spillovers of about 155 percent of the gains due to its own R&D.

Simulation exercises suggest that if the quality of education in Indonesia was to rise to the levels of Korea, Indonesia could enjoy, due to spillovers, twice the productivity gains that are currently due to own R&D capital stocks (Figure 32). Similarly, improvements in the investment climate could also lead to substantial increases in such spillover benefits. The scope for productivity gains due to international spillovers of R&D could therefore be substantial and could complement improvements in domestic R&D going forward.

Figure 31: Indonesia's relatively low domestic R&D stock leads to relatively low estimated productivity gains...

(estimated productivity gains from own R&D capital stocks normalized relative to those of Indonesia)

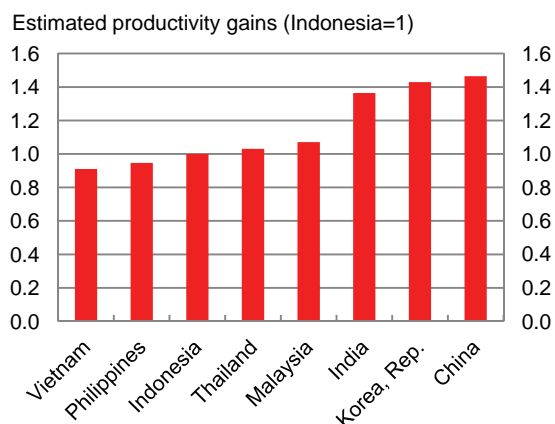
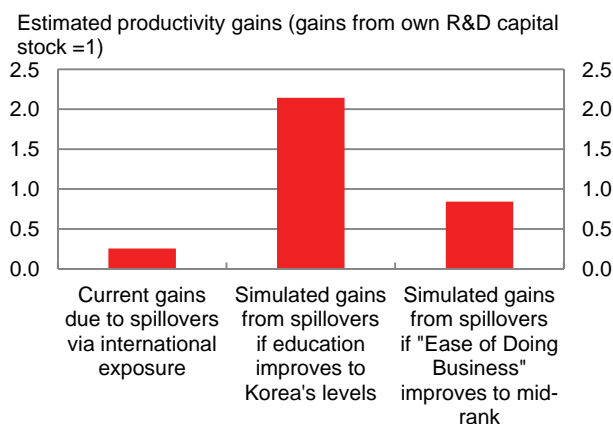


Figure 32: ...but improved education or investment climate could boost productivity spillovers from foreign R&D

(Indonesia's estimated and simulated productivity gains from international spillovers of foreign R&D relative to productivity gains from own R&D capital stock)



Note: These figures are obtained by constructing R&D capital stocks and combining them with the estimated elasticities of TFP with respect to R&D capital stocks. Sources: World Bank staff calculations based on Coe et al (2009) estimated elasticities and WDI Data on R&D stocks.

Note: Current international spillover gains calculated based on the R&D capital stock of Indonesia's trading partners, its exposure to them, and the economy's absorptive capabilities. Sources: World Bank staff calculations based on Coe et al (2009) estimated elasticities plus data from WDI, Comtrade, World Economic Forum and Doing Business database.

Note: For more details see Coe, D., E. Helpman and A. Hoffmaister (2009) "International R&D spillovers and institutions", *European Economic Review*, 53, pp.: 723-741. and Blalock, G. and P. Gertler (2009) "How firm capabilities affect who benefits from foreign technologies", *Journal of Development Economics*, 90, pp.: 192-199

2. Innovation and R&D in Indonesia

Productivity is at the core of economic development...

Productivity, or the ability to produce more with the same amount of inputs, is at the core of economic development, explaining about half of cross-country differences in income per capita.¹¹ Countries with the same endowments of inputs have different production levels partly because of differences in the quality of the endowments but also because of differences in technology. Productivity increases can take the form of new processes that reduce the inputs needed to produce the same products, but can also come from introducing new or improved products of a higher value, new ways to commercialize a product or access new markets, or organizational changes to better deliver products or services. These aspects of production, distribution and consumption of goods are what we call “technology” and their improvement, simply defined, is what we call “innovation”.

...and improving the environment for R&D in Indonesia can play an important role in increasing productivity and in moving medium-term growth up to 7 percent and beyond

If Indonesia is to reach its ambitious growth targets then investment in physical capital and infrastructure and human capital needs to be accompanied by improvements in productivity. This is recognized by the Government in its *Master Plan 2011-2025* (see the June 2011 *IEQ*), by ambitious targets for investment in R&D and by a number of recently implemented policy changes. Spending on R&D can help to facilitate and promote the process of technological progress, but the resources need to be channeled effectively. The largest returns to innovation in developing economies come from technological adaptation and adoption of existing technologies. This is why resources are not enough, but having the right channels to spend these resources is crucial to realize the benefits of R&D investment. As a brief introduction to this important issue, this section provides an overview of Indonesia's recent R&D performance and highlights the importance of skills and institutional arrangements to promote improved performance going forward.

a. Why are innovation and R&D important?

For developing countries the largest component of technological progress comes through the adoption of existing technologies and the adaptation to the local context

Technological progress can come through a number of different channels. On the one hand, it can come from the adoption and adaption of existing technologies in use in other countries or firms. On the other hand, it can be through innovations which stretch the frontier of existing knowledge. Developing new technologies or experimenting with new production processes is a costly and risky business. Drawing on existing knowledge, inventing and commercializing new technologies requires, in addition to a broad base of highly trained human capital, sophisticated (and usually expensive) equipment, effective risk-sharing mechanisms that provide incentives for invention and well-developed financial systems to ensure access to capital for commercialization. These conditions are often less conducive in many developing countries. This does not mean that developing countries cannot produce new technologies that are at the frontier of knowledge internationally, such as Brazil's expertise in deep-water drilling, but for developing countries the largest component of technological progress has historically been the adoption of existing technologies and the adaptation to the local context (World Bank, 2008).

R&D spending, if channeled efficiently, can be an effective tool to promote innovation...

While technology transfer occurs through a number of channels (such as FDI, licensing and imports of capital goods), R&D investment plays a crucial role in accelerating the process of technology adoption when linkages between R&D institutions and the productive sector are developed.¹² R&D investment can take three forms: *Basic Research* (in which no application is devised for the research being undertaken), *Applied Research* (developing new applications of existing technology) and *Development* (specifically to develop and commercialize new processes or new products). The composition of R&D spending differs greatly by country, but spending on applied research and development in developed countries is generally the largest share, with development accounting for about two thirds of spending. In fact, basic research accounts for a small share of spending even in OECD countries (OECD Science, Technology and Industry).

¹¹ World Bank (2008), *Global Economic Prospects: Technology and Technological Diffusion in Developing Countries*. <http://go.worldbank.org/TC26UFESJ0>

¹² World Bank (2008) highlights the importance of R&D investment and linkages between R&D agencies and the productive sector as one of the main channels for technological adoption.

...and has been shown to yield consistently positive and significant economic returns

The returns to R&D spending have been estimated at the plant, firm, industry and country levels, and while the size varies widely depending on the methodology and data used, the estimates are consistently positive and large.¹³ Estimates of the private returns to R&D investment, i.e. the economic benefits which accrue to the firm undertaking the investment, are in the 10-20 percent range and tend to outperform the returns to physical capital. The social returns, which include spill-over effects of R&D investment, are significantly larger, surpassing 100 percent in some estimates. Most of these studies, however, use data from developed countries.

At the country level, most estimates of the returns to R&D, measured as the elasticity of per capita GDP to investment in R&D, in developing countries point to large returns, even higher than in developed countries. Lederman and Maloney (2003)¹⁴, for example, find returns of around 78 percent in the overall sample of countries, and higher for developing countries. In fact, allowing for differences in returns by income level the returns for middle income countries is estimated at around 60 percent, while returns in poor countries are closer to 100 percent. Their estimates for the returns in natural resource rich countries are higher, but these countries tend to spend less in R&D, as seen in the case of Indonesia.

The existing information on the characteristics of R&D investment in Indonesia is scarce and there is no estimate of the returns to R&D investment

The existing literature on R&D in Indonesia is mainly descriptive, enumerating existing resources and institutions and focusing mainly on agricultural R&D.¹⁵ Gert-Jan Stads and Nurjayanti (2007) provide a comprehensive picture of agricultural R&D in Indonesia up to 2003, highlighting the fragmentation, low availability of researchers and resources and the relatively high private sector involvement (as compared to R&D in other sectors). Very little information is available about technology adoption both in agricultural and manufacturing or about technology commercialization in the country. Wie (2005) explores the importance of different channels for technology transfer, highlighting FDI, technical licensing agreements without equity involvement by the foreign licensor, capital goods imports, and participation in world trade. This work uses data from the 1990s and does not cover actual technology adoption by Indonesian firms. Low technology awareness is suggested by Simmamora and Rahayu (2009) as a major constraint for technology adoption, using a survey of executives in 53 industry associations. The World Bank's Investment Climate Survey for Indonesia (2009) also suggests that the lack of quality certifications may be constraining the adoption of foreign technologies through licensing agreements. Overall, however, none of these papers provides a comprehensive picture of technology adoption or specific estimates of returns to R&D investment in Indonesia.

b. Indonesia's R&D spending is low, particularly by the private sector

Indonesia's total expenditure on R&D is very low (0.08 percent of GDP in 2009) and is significantly less than that of its neighbors and what would be predicted by its level of development

A recent survey of public research institutes, state universities and the manufacturing sector shows that Indonesia's R&D expenditure, at 0.08 percent of GDP in 2009¹⁶, is significantly below regional peers such as China (1.44 percent in 2007), Malaysia (0.63 percent in 2006) and Thailand (0.26 percent in 2006). It is also well below the expenditure levels of the leading countries in Latin America (Brazil, Chile or Argentina) or Russia (Figure 33). Despite increasing spending in recent years and increasing its share of GDP from 0.06 to 0.08 percent, the growth in spending is still far below that of neighboring countries. During the same period, both China and Malaysia have tripled their investment in R&D relative to their GDP, and even countries with initial levels of investment far above that of Indonesia have continued to invest more in R&D (Singapore and Korea have increased their expenditures by 40 percent over the same period).

¹³ See Hall, B.H. and Rosenberg, N., 2011, *Handbook of the Economics of Innovation* for a comprehensive survey of estimates of the return to R&D investment.

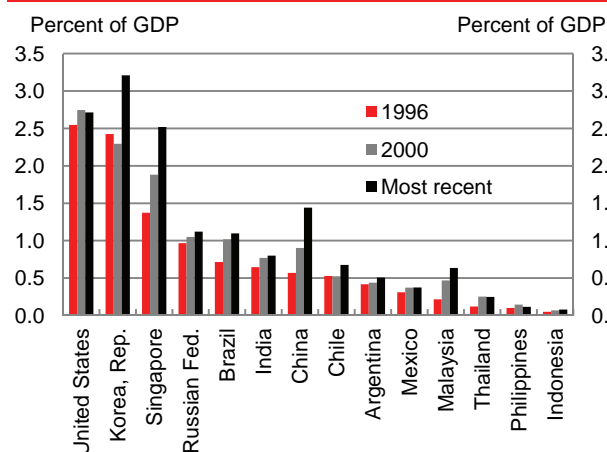
¹⁴ Lederman, D. and Maloney, W. F., 2003, "R&D and Development", *World Bank Policy Research Working Paper* No. 3024.

¹⁵ See, for example, Gert-Jan Stads, H. and Nurjayanti, S., 2007, "Agricultural R&D in Indonesia: Policy, Investments and Institutional Profile November", International Food Policy Research Institute and Indonesian Agency for Agricultural Research and Development; Wie, T.K., 2005, "The Major Channels of International Technology Transfer to Indonesia: An Assessment" *Journal of the Asia Pacific Economy*, Vol. 10, No. 2, pp. 214–236; Simmamora, N. and Rahayu, S., 2010, "Do Indonesian Entrepreneurs Have Science and Technology Awareness to enhance their Innovation?" Center for Science and Technology Development Studies, Indonesian Institute of Sciences.

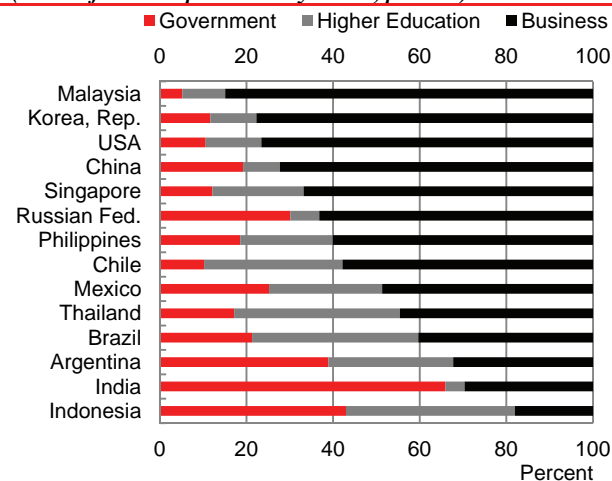
¹⁶ Indonesian Institute of Sciences LIPI, 2011, Study on the Status of Science and Technology in Indonesia.

Figure 33: Indonesia's R&D expenditure is relatively low and Figure 34: ...and a relatively low share is conducted by the private sector

(R&D expenditure as percent of GDP)



(share of R&D expenditure by sector, percent)



Note: Most recent year is 2007 except for United States and Sources: UNESCO Science & Technology (S&T) Indicators Russia (2008), Malaysia (2006), and Indonesia (2009) (2009), except Indonesia from LIPI Status of S&T in Sources: UNESCO Science & Technology (S&T) Indicators Indonesia (2011) (2009), except Indonesia from LIPI Status of S&T in Indonesia (2011)

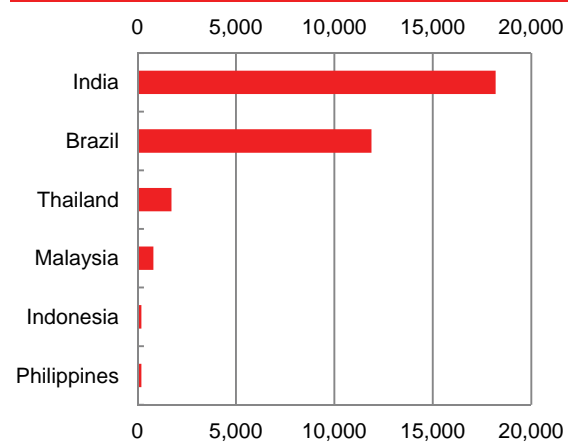
In Indonesia 80 percent of R&D is carried out by public institutions, about half in universities and half in public R&D institutes

In addition to having a relatively low level of R&D, Indonesia is also notable for the high share of R&D carried out by public R&D institutions and universities (Figure 34). This is in sharp contrast with the large participation of the private sectors not only in countries with highly developed knowledge economies like Korea, Singapore or the United States, but also to emerging economies at earlier stages of scientific development (China, Malaysia or Brazil for example). Within the private sector, the manufacturing sector carries out very little research, with less than 5 percent of manufacturing companies reported as having an R&D center (LIPI 2011). For those that report R&D expenditure, the share of total investment devoted to R&D is less than 0.1 percent.

Indonesia's performance on traditional R&D output indicators is also relatively low compared with countries of similar level of development

Turning to R&D outputs, perhaps the most direct measure is scientific publications. Both when normalized by the size of the population or the number of researchers, Indonesia ranks especially low when compared to other middle income countries (Figure 35). Not surprisingly, other commonly used indicators of R&D output that tend to measure more advanced knowledge creation such as fees received from royalties and licenses (USD 31 million, or 0.14 cents per person) or patents granted by the United States Patent and Trademark Office (18 in the 2003-07 period) are also much lower in Indonesia than for example in Brazil (royalty/license fees of USD 53 per person and 141 patents), China (USD 31.9 per person and 758 patents) or India (USD 13.3 per person and 446 patents). These indicators measure the relative position to the technological frontier and not necessarily technological adoption. The vast differences with these countries highlight the need to refocus R&D investment from basic research into facilitating adoption of existing technologies.

Figure 35: Publications are one measure of R&D output
(number of publications with country author)



Note: Number of scientific and technical journal articles, 2007

Source: World Bank World Development Indicators

c. The importance of human capital and institutions for R&D performance

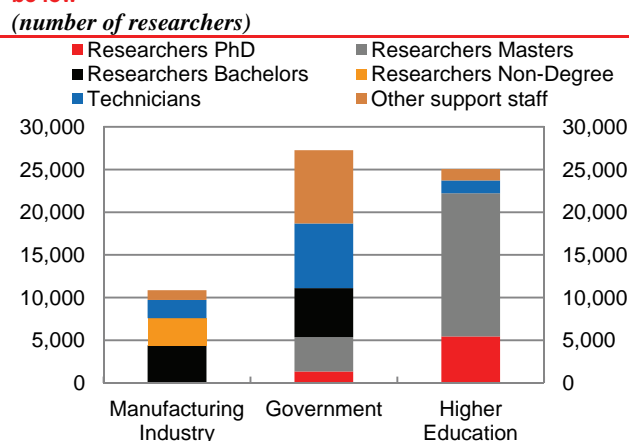
The availability of highly qualified human resources is a constraint for R&D activities within Indonesia...

In 2009 there were about 65,000 research staffs in Indonesia, with two thirds of those researchers and one third technicians (LIPI 2011). For a country the size of Indonesia, this is a very low number, as shown in Figure 36 which scales for population size. In addition, their qualifications are relatively low, especially in the private sector. Universities have the largest number of researchers with PhD or Masters, followed by other public research institutions (Figure 37). Meanwhile, most researchers in the private sector have a bachelor degree as their highest degree. Since most of the higher trained researchers are in public institutions, it is important to leverage these resources by improving linkages between these institutions and the productive sector.

Figure 36: Indonesia has a relatively small number of researchers within the labor force...



Source: Unesco Institute for Statistics



Source: Study of the Status of Science and Technology in Indonesia, Indonesian Institute of Sciences (LIPI) 2011

...along with the institutional set up, and the fragmentation of the R&D system, both in terms of funding sources and the wide array of R&D institutions

While the Ministry of Research and Technology (*Kementerian Riset dan Teknologi*, RISTEK) has the mandate to develop and coordinate national science and technology policy, it is currently constrained in its capacity to influence the implementation of science and technology policy. The most direct influence is its role as the coordinating agency for the seven non-ministerial research institutes (*Lembaga Pemerintah Non Kementerian*, LPNK), which are the main executors for government policy priorities in science and technology. In addition to these public research institutes, R&D activities are carried out by a number of institutions under the auspices of other ministries. While virtually every ministry has its own research arm, the most notable are the Ministries of Education (universities), Health, Agriculture, and Forestry. Funding is similarly spread out across different ministries, which usually allocate funding to institutions on a non-competitive basis and through funding formulas not directly linked to the productivity of the institutions or to a coherent R&D strategy within a context of broader Government priorities. The dispersed nature of the system and the lack of effective policy tools to coordinate all stakeholders make an integrated research agenda difficult to coordinate and implement.

An additional challenge associated with the institutional fragmentation is the fragmentation in funding, which is largely allocated on a non-competitive basis. The experience with competitive grants in Indonesia is mixed. The competitive research grant program managed by RISTEK through the National Research Council (DRN) is well-organized and has much potential to further expand its scope and improve overall research outcomes. Current plans and trends indicate that R&D is gradually moving out of basic research and more in the direction of practical applications and technology dissemination. In addition, there is a growing awareness of the importance of collaborating with the private sector and local communities both as a way of improving the relevance of research and generating more resources. However, the current grants program only accounts for a small share of the overall R&D spending, it is limited to one year projects, it does not require matching grants from implementing institutions or private sector partners, and it is spread too thinly, so any one project only gets a very small amount (see Box 7 below on type of public support that can be provided for innovation).

Box 7: Competitive research grants

Research grants can take mainly three basic forms: i) direct allocation to research institutions or research consortia, ii) competitive research grants iii) matching grants (usually allocated on a competitive basis). When used effectively, they can promote diverse activities, such as demand-driven research, adaptive research that improves the relevance and dissemination of new technologies, demand-driven services, productive partnerships, and links to markets. The rationale for providing grants is often associated with the public good nature of the investment; the promotion of innovation, learning, or partnerships; or the reversal of market failures. As instruments of government policy, grants should be coordinated with other policy instruments, and their benefits should exceed their cost. In terms of impact, both competitive research grants and matching grants have been shown to generate positive impacts in the literature, both on the quality of research and the commercialization.¹⁷

A number of different types of grants can be provided. Competitive research grants (CRGs) provide funding to research through competition based on scientific peer review. These grants can promote innovation by focusing scientists' efforts on high-priority research or new fields of expertise; improving the relevance and quality of research, promoting research partnerships and leveraging research resources. Matching grants (MGs) are where funds from the granting organization (usually a public agency) are matched with funds from the beneficiary. Such grants are increasingly used internationally to promote near-market technology generation, technology transfer and adoption, private economic activity, and overall innovation, often by including multiple stakeholders. By attracting users of technologies and knowledge in partnerships, MGs may be more effective than CRGs at enhancing the use of technology and knowledge.

Both types of grants are not exclusive, so it is important to identify the appropriate mix of competitive, matching and institutional funding to respond effectively to the challenges, actors, and opportunities in a given context. For example, CRGs are usually selected to promote high-quality, relevant basic or adaptive research or to support complementary objectives, such as research dissemination, research priority setting, development of a research culture, and development of highly skilled scientists. Criteria for selecting grant recipients should reflect the grant scheme's objectives; emphasize relevance, quality, diversity, and economic considerations; and be relevant to wider national goals. Increasingly, partnership is a criterion. With CRGs, prospects for sustainability increase when selection criteria include the development of plans to disseminate results, transfer technology, and/or sustain research when grant funding ends.

MGs may be preferable to CRGs when the objective is to promote (i) pluralism in applied technology development, transfer, and adoption (particularly among research providers and the private sector); overall agribusiness sector development (particularly through productive partnerships and technical assistance and services); or (iii) the productive activities of farmer groups, value-added activities, and small-scale infrastructure, often associated with community-driven development approaches. Criteria for many MGs emphasize the local context, the additionality of the investment, the inclusion of diverse groups of stakeholders, and an aptitude for partnership (a key condition for MGs to foster innovation). A useful practice is to weight criteria rather than to rely on simple scoring.

Regardless of the funding mix, a critical step in designing a grant scheme is to determine which themes and strategic interventions it will support and ensure that resources are not spread too thinly, focusing on priority interventions and allowing limited funding for other innovative activities.

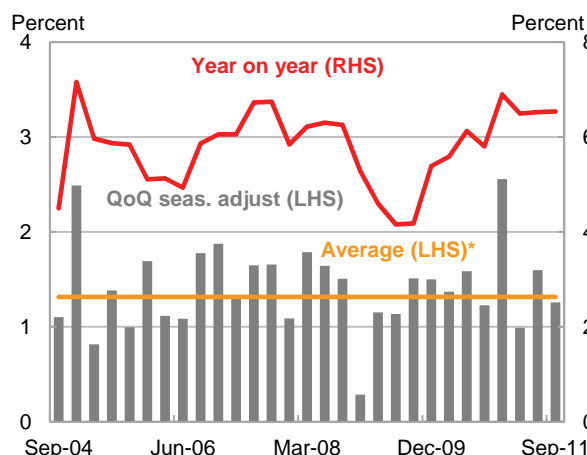
Source: Adapted from *Designing and Implementing Agricultural Research Grants: Lessons from Competitive Research and Matching Grants*, World Bank (2010)

The Government of Indonesia (GoI) has made innovation a priority area and has taken important steps towards developing an effective Science, Technology and Innovation (STI) system, but much remains to be done

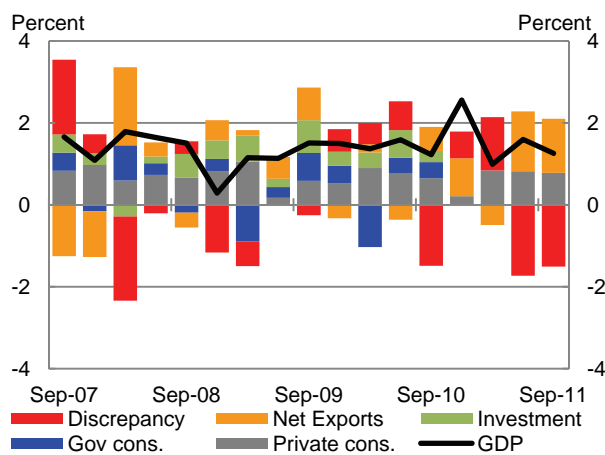
Indonesia has taken some initial steps to address existing constraints for the effectiveness of the innovation system: the availability of qualified human resources, effective policy coordination and incentives for private sector participation. To improve human resources, the country has expanded access to higher education and invested in scholarships to send students abroad with a condition to return to Indonesia upon completion of their studies. However, this will have only medium to long term effects on the system. Meanwhile, at the policy coordination level, the creation of the National Innovation Commission¹⁸ (KIN) and the *Master Plan* 2011-2025 set the stage for the development of an effective innovation system. The creation of the KIN as a high-level independent advisory body that reports directly to the President highlights the commitment at the highest political level and the understanding that effective policy coordination is critical. KIN has already produced a draft strategy for STI, which has been submitted to the President. The *Master Plan* should also provide coherent guidance to direct R&D investment. In addition, RISTEK has already initiated a revision of the legal framework for the "National Innovation System". These are steps in the right direction, but international experience shows that reforms of the innovation system require time, effort and a long-term vision. However, they do pay-off. If these reforms are successful, it will be a big step towards meeting the ambitious objectives GoI has set for itself and which can help promote Indonesia's future economic growth.

¹⁷ Most impact evaluations in developing countries have been carried out in Latin America. See, for example, Hall B. and Maffioli A. (2008) "Evaluating the impact of technology development funds in emerging economies: Evidence from Latin America", NBER Working Paper 13835.

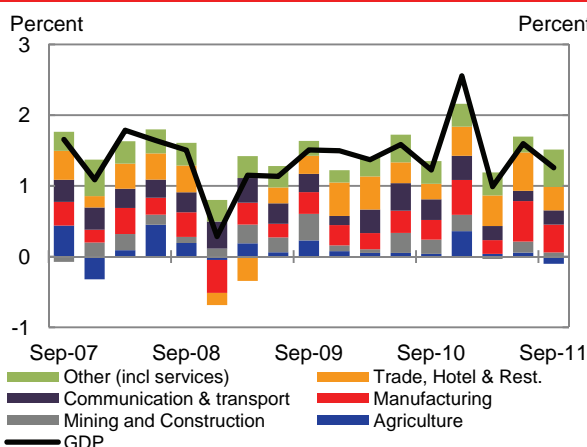
¹⁸ Composed of members from the Ministry of Research and Technology (*Kementerian Riset dan Teknologi*, RISTEK), non-ministerial research institutes (*Lembaga Pemerintah Non Kementerian*, LPNK), academia, and private sector representatives.

APPENDIX: A SNAPSHOT OF INDONESIAN ECONOMIC INDICATORS**Appendix Figure 1: Quarterly and annual GDP growth (percent growth)**

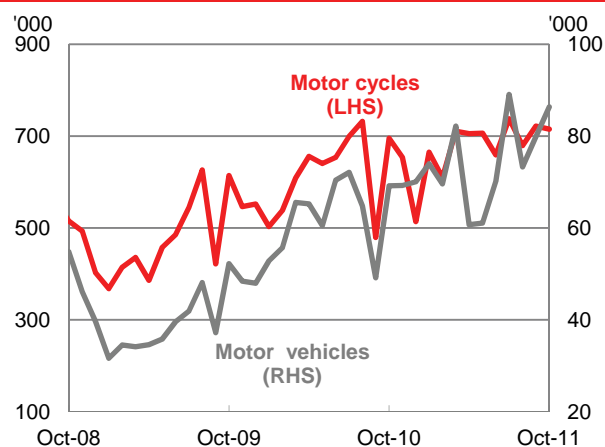
*Average QoQ growth between Q3 2004 – Q3 2011
Sources: BPS, World Bank seasonal adjustment

Appendix Figure 2: Contributions to GDP expenditures (quarter-on-quarter, seasonally adjusted)

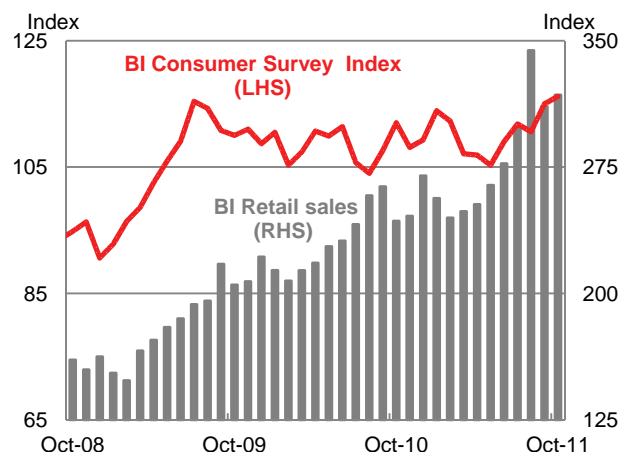
Source: BPS via CEIC and World Bank

Appendix Figure 3: Contributions to GDP production (quarter-on-quarter, seasonally adjusted)

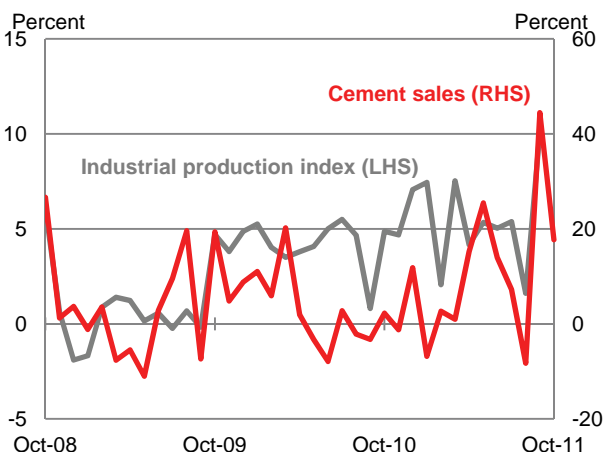
Source: BPS via CEIC

Appendix Figure 4: Motor cycle and motor vehicle sales (monthly sales)

Source: CEIC

Appendix Figure 5: Consumer indicators (index levels)

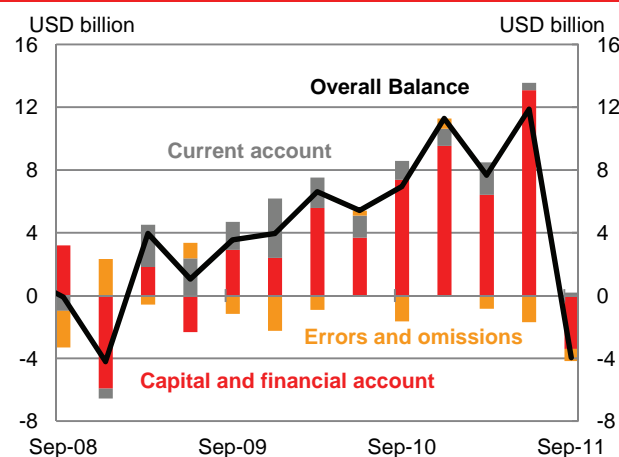
Source: BI via CEIC

Appendix Figure 6: Industrial production indicators (year-on-year growth)

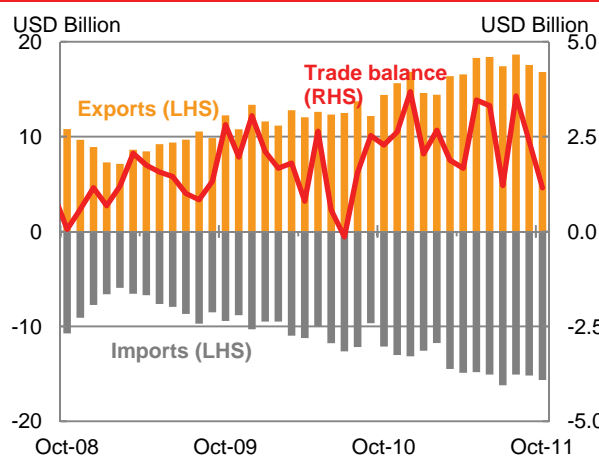
Source: CEIC

Appendix Figure 7: Real trade flows
(quarter-on-quarter growth)

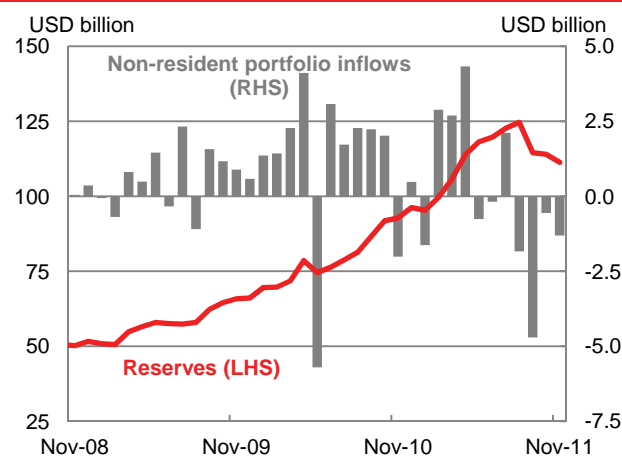
Source: CEIC

Appendix Figure 8: Balance of Payments
(USD billion)

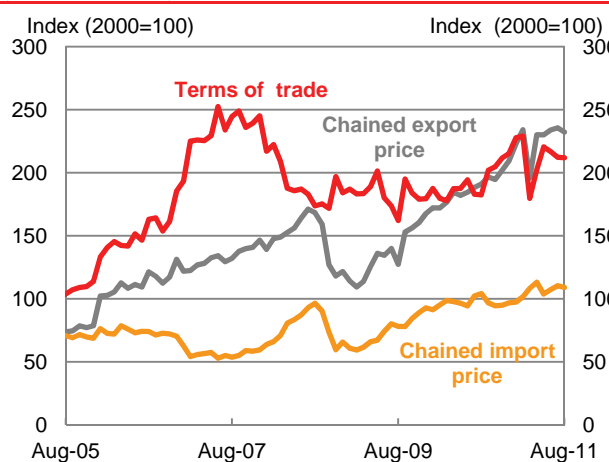
Source: BI and World Bank

Appendix Figure 9: Trade balance
(USD billion)

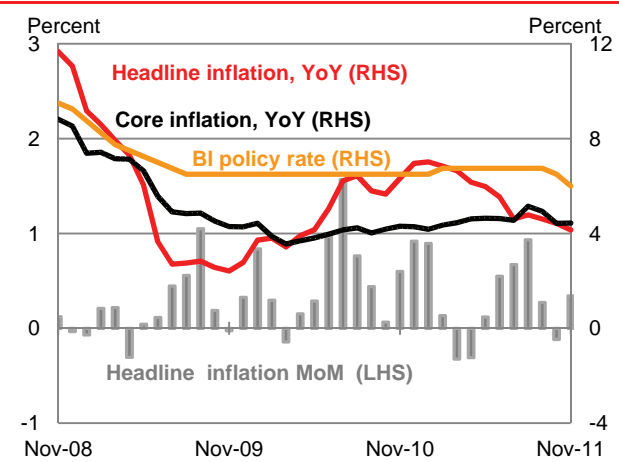
Source: BPS and World Bank

Appendix Figure 10: Reserves and capital inflows
(USD billion)

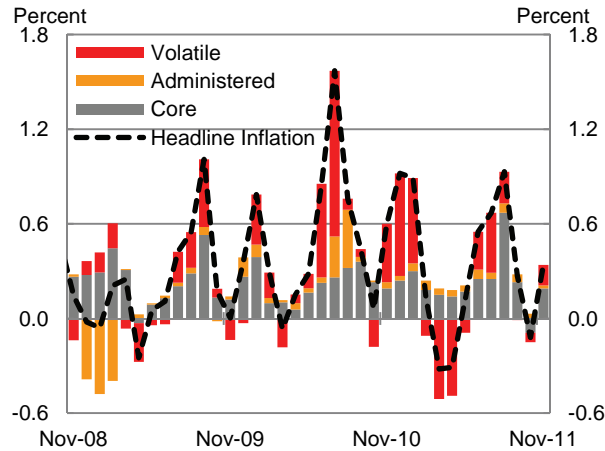
Source: BI and World Bank

Appendix Figure 11: Term of trade and export and import chained Fisher price indices
(index 2000=100)

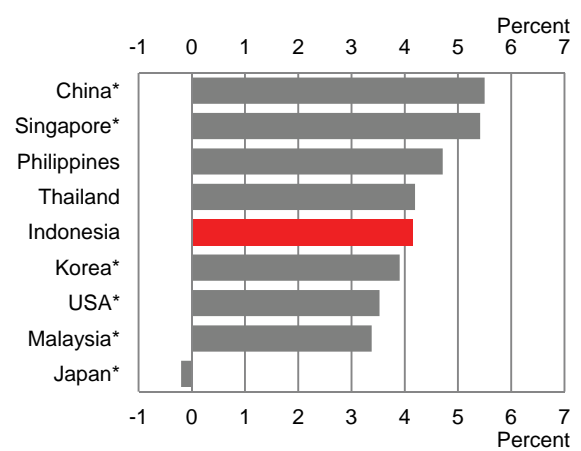
Source: BPS and World Bank

Appendix Figure 12: Inflation and monetary policy
(month-on-month and year-on-year growth, percent)

Source: BPS and World Bank

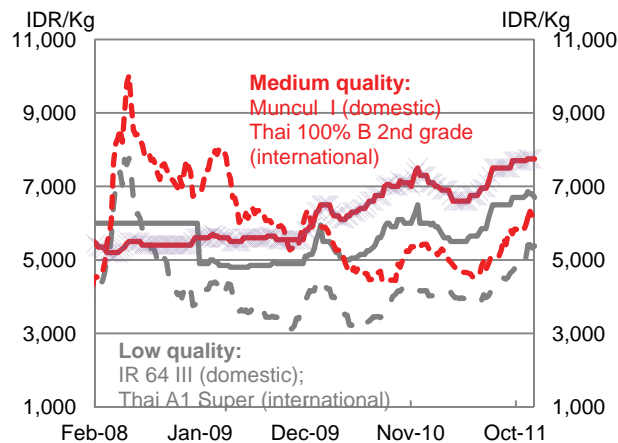
Appendix Figure 13: Monthly breakdown of CPI
(percentage point contributions to monthly growth)

Sources: BPS and World Bank

Appendix Figure 14: Inflation among neighboring countries
(percent year-on-year, November 2011)

*October is latest available month

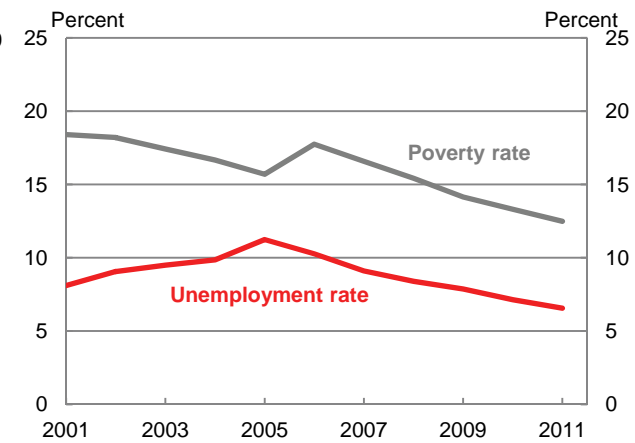
Sources: National statistical agencies via CEIC, and BPS

Appendix Figure 15: Domestic and international rice prices
(IDR per kg)

Note: Dashed: international Thai rice (cif) prices.

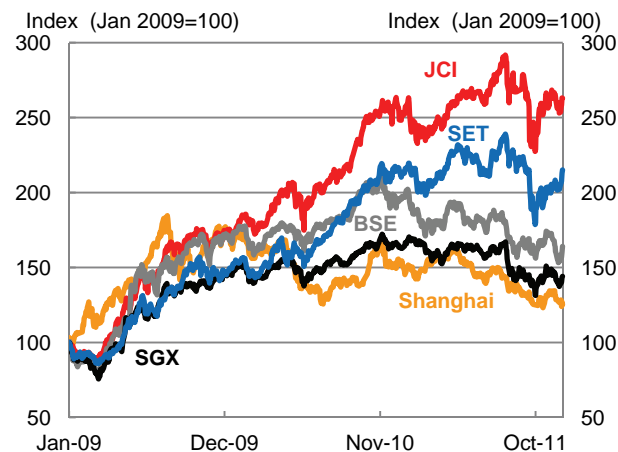
Solid: domestic wholesale rice

Sources: PIBC, FAO and World Bank

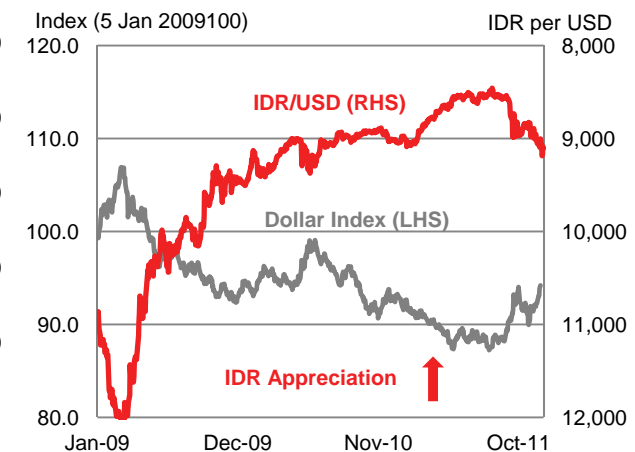
Appendix Figure 16: Poverty and unemployment rate
(percent)

Note: Labor data from August Sakernas

Sources: BPS, and World Bank

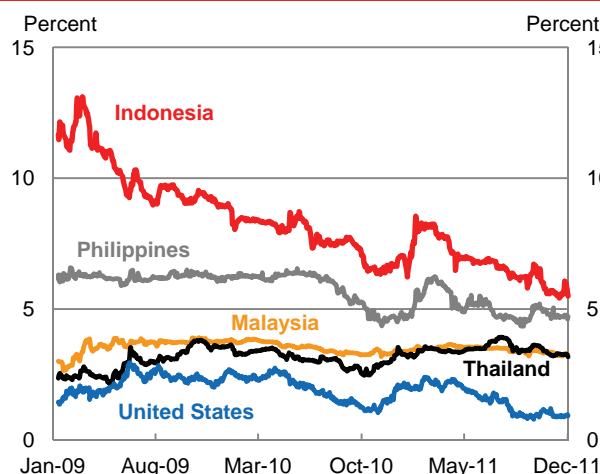
Appendix Figure 17: Regional equity indices
(daily, index January 2009=100)

Sources: World Bank and CEIC

Appendix Figure 18: Dollar index and Rupiah exchange rate
(daily, index and levels)

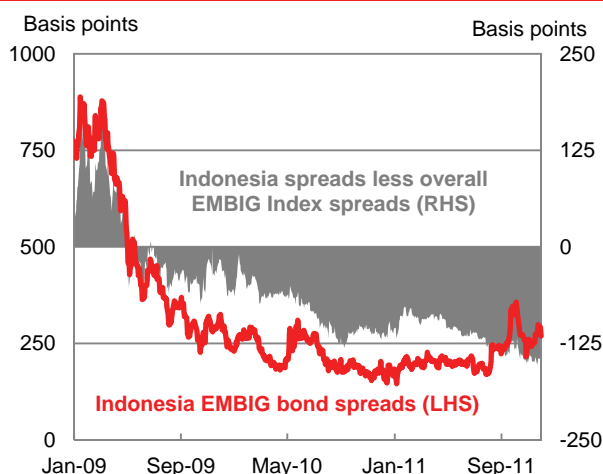
Sources: World Bank and CEIC

Appendix Figure 19: 5 year local currency government bond yields
(daily, percent)



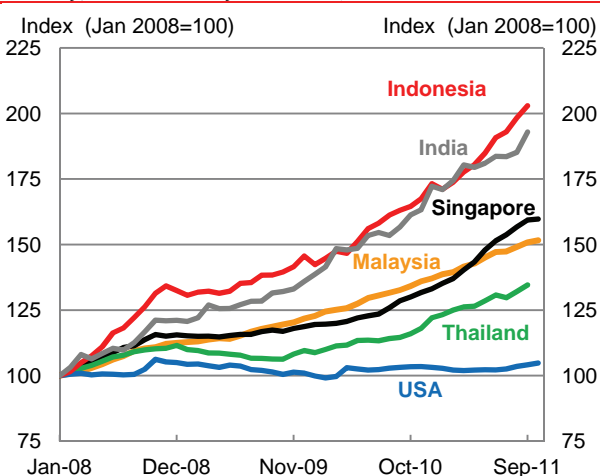
Sources: World Bank

Appendix Figure 20: Sovereign USD Bond EMBI spreads
(daily, basis points)



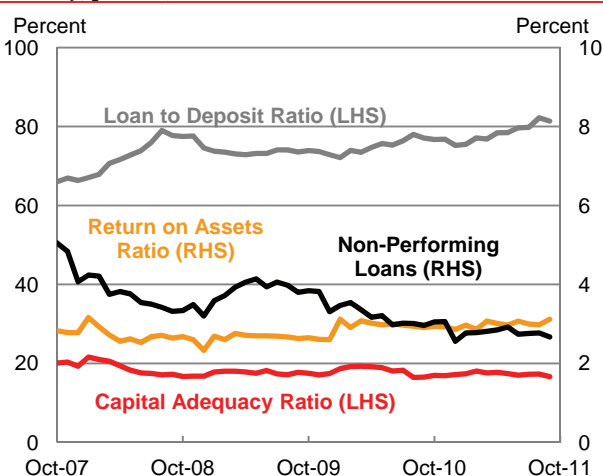
Sources: World Bank and CEIC

Appendix Figure 21: International commercial bank lending
(monthly, index January 2008=100)



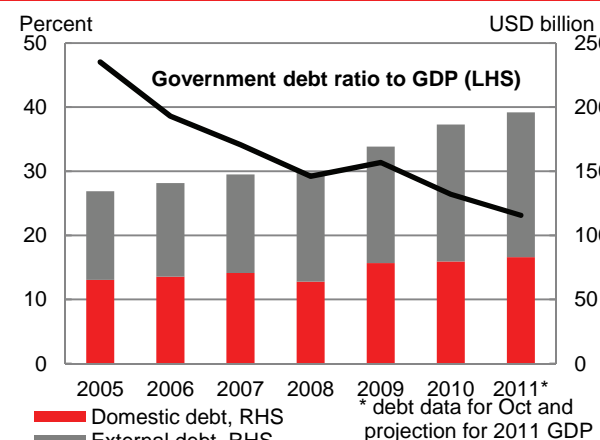
Sources: CEIC and World Bank

Appendix Figure 22: Banking sector indicators
(monthly, percent)



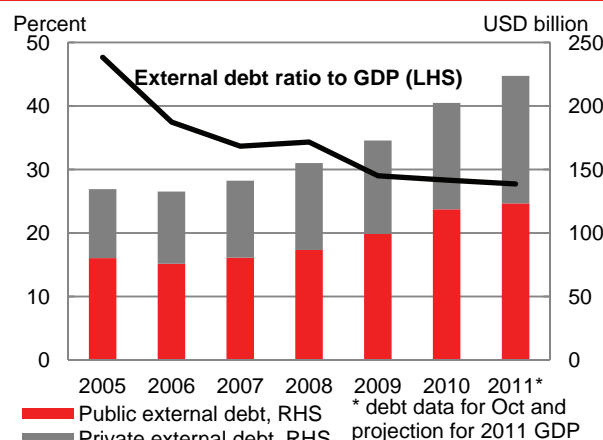
Sources: BI and World Bank

Appendix Figure 23: Government debt
(percent of GDP; USD billion)



Sources: BI and World Bank

Appendix Figure 24: External debt
(percent of GDP; USD billion)



Sources: BI and World Bank

Appendix Table 1: Budget outcomes and estimates
(IDR trillion)

	2009	2010	2011	2011 (p)	2011 (p)	2012	2012 (p)
	Outcome	Outcome	Revised budget	WB Sept estimates*	WB Dec estimates*	Budget	WB Dec estimates*
A. State revenue and grants	848.8	1,014.0	1,169.8	1,185.8	1,179.4	1,311.4	1,329.6
1. Tax revenue	619.9	744.1	878.6	857.1	857.4	1,310.6	985.8
a. Domestic tax	601.3	715.2	831.7	801.5	802.1	989.6	931.9
i. Income tax	317.6	356.6	431.9	419.7	419.1	520.0	487.3
- Oil and gas	50.0	58.9	65.2	65.4	64.9	60.9	66.7
- Non oil and gas	267.5	297.7	366.7	354.4	354.2	352.9	420.6
2. Non-tax revenue	227.2	267.5	286.5	328.7	322.0	278.0	343.8
<i>o/w natural resources</i>	139.0	170.1	192.0	213.1	204.3	177.3	212.7
i. Oil and gas	125.8	152.7	173.2	192.8	184.3	159.5	190.2
ii. Non oil and gas	12.8	17.3	18.8	20.2	20.0	17.8	22.5
B. Expenditure	937.4	1,053.5	1,320.8	1,296.7	1,295.1	1,435.4	1,414.1
1. Central government	628.8	708.7	908.3	878.6	872.8	952.5	944.7
2. Transfers to the regions	308.6	344.7	412.5	418.1	422.2	470.4	469.4
C. Primary balance	5.2	48.9	-44.4	-6.8	-9.1	-1.8	36.2
D. SURPLUS / DEFICIT	(88.6)	(39.5)	(151.0)	(111.0)	(115.7)	(124.0)	(84.5)
Deficit (percent of GDP)	(1.6)	(0.6)	(2.1)	(1.5)	(1.6)	(1.5)	(1.0)

Note: *World Bank revenue estimates are based on a different methodology than the Government to derive projections for nominal GDP (see Part C of the December 2011 *IEQ* for a full discussion)

Source: MoF and World Bank estimates

Appendix Table 2: Balance of Payments
(USD billion)

	2009					2010				2011		
	2008	2009	2010	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	
Balance of Payments	-1.9	12.5	30.3	4.0	6.6	5.4	7.0	11.3	7.7	11.9	-4.0	
<i>Percent of GDP</i>	-0.4	2.3	4.3	2.6	4.1	3.1	3.7	6.1	3.9	5.6	-1.8	
Current Account	0.1	10.6	5.6	3.8	1.9	1.4	1.2	1.1	2.1	0.5	0.2	
<i>Percent of GDP</i>	0.0	2.0	0.8	2.5	1.2	0.8	0.6	0.6	1.1	0.2	0.1	
Trade Balance	9.9	21.2	21.3	7.1	4.8	4.6	5.4	6.4	6.6	6.3	6.7	
Net Income & Current Transfers	-9.8	-10.6	-15.7	-3.3	-2.9	-3.2	-4.2	-5.4	-4.5	-5.8	-6.5	
Capital & Financial Accounts	-1.8	4.9	26.2	2.4	5.6	3.7	7.4	9.5	6.4	13.1	-3.4	
<i>Percent of GDP</i>	-0.4	0.9	3.7	1.6	3.5	2.1	4.0	5.1	3.3	6.2	-1.5	
Direct Investment	3.4	2.6	10.7	0.8	2.5	2.3	1.7	4.2	3.2	3.5	2.4	
Portfolio Investment	1.8	10.3	13.2	3.5	6.2	1.1	4.5	1.4	3.6	5.5	-4.7	
Other Investment	-7.3	-8.2	2.3	-1.9	-3.1	0.3	1.2	3.8	-0.4	4.1	-1.1	
Errors & Omissions	-0.2	-3.0	-1.6	-2.2	-0.9	0.3	-1.6	0.6	-0.8	-1.7	-0.8	
Foreign Reserves*	51.6	66.1	96.2	66.1	71.8	76.3	86.6	96.2	105.7	119.7	114.5	

Note: * Reserves at end-period

Source: BI and BPS



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