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INDONESIA ECONOMIC QUARTERLY

2008 again?

March 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 (trade flows, balance of payments), Andrew Carter (government revenues), Andrew Ceber (national accounts, oil, domestic investment and risks), Fitria Fitrani (external sector), Faya Hayati (prices, food prices and poverty), Ahya Ihsan (government expenditure), Kiyoshi Taniguchi (middle class, international environment) and Ashley Taylor. Additional contributions were received from Hassan Noura and Dhanie Nugroho (fuel subsidies), Matthew Wai-Poi and Taufik Hidayat (patterns of household consumption growth) and Neni Lestari and Djauhauri Sitorus (banking). Tia Chandra and Ashley Taylor shared the editing and production. Jason Allford, Enrique Blanco Armas and William Wallace provided detailed comments and input. Farhana Asnap, Indra Irnawan, Jerry Kurniawan, Marcellinus Winata and Randy Salim organized the dissemination and Anita Ristanti, Sylvia Njotomihardjo and Nina Herawati provided valuable administrative support

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In order to be included on an email distribution list for this Quarterly series and related publications, please contact madriani@worldbank.org. For questions and comments relating to this publication, please contact ataylor2@worldbank.org.

Table of contents

Preface	iii
Executive Summary: 2008 again?	viii
A. ECONOMIC AND FISCAL UPDATE	1
1. Commodity price volatility has dominated recent international developments	1
2. The broad-based growth of Q4 points to a positive outlook for 2011	3
3. Balance of payment inflows reach record levels	6
4. Commodity price rises increased headline inflationary pressures	9
5. Portfolio inflows moderated in early 2011 as bond and equity prices corrected	10
6. Rising commodity prices and prospects for disbursement rates are the main uncertainties for the fiscal outlook in 2011	12
7. Near-term uncertainty around the outlook has risen	16
B. SOME RECENT DEVELOPMENTS IN INDONESIA'S ECONOMY	18
1. Recent rises in food prices and their impact on poor and vulnerable households	18
a. Resurgent food inflation in Indonesia was driven by increasing domestic rice prices	18
b. Poor households purchasing power is reduced because of rising food prices	20
c. Policy responses to assist vulnerable and poor households	21
2. Indonesia's fuel subsidies: past experience and lessons from other countries	24
a. Indonesia's fuel subsidies are costly and create risks for public finances	24
b. Fuel subsidies are also highly regressive and distortionary	27
c. Current reform plans and lessons from other countries	28
C. INDONESIA 2014 AND BEYOND: A SELECTIVE LOOK	31
1. Indonesia's changing patterns of consumption growth from 1996 to 2010	31
a. Indonesia was the most affected country during the 1997-98 crisis but after a slow recovery has experienced strong growth	31
b. Although outcomes have not been the same for all households with richer households experiencing greater growth in consumption from 1996 to 2010	32
c. However, this overall trend masks considerable differences across sub-periods	32
d. ...leading to changes in the consumption distribution	34
e. ...which has seen inequality first fall and then rise again over the period	35
f. A focus on promoting equality of opportunities is important as Indonesia transitions to a middle-income country	36
2. Looking towards a rising middle class in Indonesia	38
a. Defining the middle class	38
b. How large is the middle class in Indonesia?	38
c. What does the emergence of a middle class mean for economic policy making?	41
APPENDIX: A SNAPSHOT OF INDONESIAN ECONOMIC INDICATORS	42

LIST OF FIGURES

Figure 1: Energy and non-energy prices have increased further in recent months.....	1
Figure 2: Oil prices have risen sharply	2
Figure 3: Emerging market portfolio inflows have retreated from their highs of September 2010	3
Figure 4: Quarterly growth reached recent highs in Q4 2010.....	4
Figure 5: ...driven by year-end government spending, net exports and investment consumption	4
Figure 6: The pick-up manufacturing growth in Q4 was notable	4
Figure 7: Rising construction prices playing a key role in the increase in nominal investment ...	5
Figure 8: The recent rise in exports has been broad-based across products	7
Figure 9: Poverty basket inflation moved upwards with the rise in food price inflation.....	9
Figure 10: ...but February saw a fall back in the monthly rate of CPI growth as food prices stabilized	9
Figure 11: Nominal bond yields rose in early 2011 in many countries.....	11
Figure 12: After a weak few months, non-resident investor portfolio inflows returned in February	11
Figure 13: Revenues were strong in December 2010.....	13
Figure 14: Export taxes, although a small share of revenues, have risen with CPO prices	13
Figure 15: Overall disbursements rates were little improved on 2009	13
Figure 16: Rice price increases made a major contribution to year-end inflation, particularly for the poor	19
Figure 17: The rate of increases in grains prices was not uniform across cities.....	19
Figure 18: The Indonesian price of rice is considerably higher than the international price	20
Figure 19: Indonesia's food inflation is amongst the highest in the region	20
Figure 20: While trending down, spending on fuel subsidies continues to consume a large share of public spending... ..	25
Figure 21: ...and dwarfs capital and targeted social spending	25
Figure 22: The gasoline subsidy has recently replaced kerosene as the costliest fuel subsidy.	25
Figure 23: Final realized spending on fuel subsidies exceeded the original planned budget in 6 out of the last 7 years.....	26
Figure 24: Yields on Indonesian government bonds have risen when the gap between global oil prices and Indonesian retail prices has widened	26
Figure 25: Commercial users and wealthier households consume the bulk of subsidized gasoline... ..	27
Figure 26: ...whereas most poor and near-poor households do not consume gasoline.....	27
Figure 27: Fuel subsidies, especially for gasoline, mostly go to wealthier households	28
Figure 28: The economic impact of the Asian Financial Crisis on Indonesia was the most severe and longest in duration in the region	31
Figure 29: Richer households have seen greater growth in consumption from 1996 to 2010	32
Figure 30: Growth in consumption has varied for different parts of the distribution over time ..	33
Figure 31: The distribution shifts left during the Asian Crisis... ..	34
Figure 32: ...and back rightwards during the 1993 to 2003 recovery	34
Figure 33: The middle of the distribution shifts rightwards over 2003 to 2010 while the poorest remain unchanged	34
Figure 34: The entire distribution shifts rightwards during more balanced growth from 2003 to 2010	34
Figure 35: Population increased significantly in the US\$2-6 expenditure brackets.....	39
Figure 36: In urban areas there are rising numbers in the higher-middle income class	40
Figure 37: The rise of the rural middle class has become more pronounced in recent years	40
Figure 38: Indonesia's middle income class accounts for three-quarters of total expenditures.	40
Figure 39: Non-food expenditures are greater for the higher middle-income groupings.....	41

LIST OF APPENDIX FIGURES

Figure 1: GDP growth moderates	42
Figure 2: Contributions to GDP expenditures	42
Figure 3: Contributions to GDP production	42
Figure 4: Motor cycle and motor vehicle sales.....	42
Figure 5: Consumer indicators	42
Figure 6: Industrial production indicators	42
Figure 7: Real trade flows.....	43
Figure 8: Balance of Payments	43

Figure 9: Trade balance	43
Figure 10: International reserves and capital inflows	43
Figure 11: Term of trade and monthly export and import chained Fisher-Price indices	43
Figure 12: Inflation and monetary policy	43
Figure 13: Monthly breakdown of CPI	44
Figure 14: Inflation amongst neighboring countries.....	44
Figure 15: Domestic and international rice price comparison	44
Figure 16: Poverty, employment, and unemployment rate.....	44
Figure 17: Regional Equity Indices.....	44
Figure 18: Broad Dollar Index and Rupiah Spot	44
Figure 19: 5 Year Local Currency Government Bond Yields.....	45
Figure 20: Sovereign USD Bond EMBI Spreads	45
Figure 21: International Commercial Bank Lending.....	45
Figure 22: Banking Sector Financial Indicators	45

LIST OF TABLES

Table 1: Growth is projected to rise gradually through 2011 and 2012.....	viii
Table 2: Many global commodity prices now exceed the highs of 2008	1
Table 3: Indonesia's oil exposure	2
Table 4: Indonesia's rising nominal investment rate	5
Table 5: Aggregate GDP projections for 2010 and 2011 have been upgraded	6
Table 6: Balance of payments inflows to fall off the record highs of 2010 but to remain strong...7	
Table 7: Rising importance of intra-regional trade for East Asian economies.....	8
Table 8: Shifting share towards export commodities for Indonesia.....	8
Table 9: Some line ministries receiving substantial expenditure increases in 2011 had low disbursement rates in 2010	14
Table 10: The 2011 budget projects some expansion of the deficit as key spending areas are supported.....	15
Table 11: Gross financing in 2010 came in well above outturn financing needs	16
Table 12: Different oil price scenarios for 2011 mostly impact the budget deficit	17
Table 13: The status quo would lead to additional spending on fuel subsidies, especially if oil prices remain around their recent high levels or rise further.....	29
Table 14: Inequality fell over the crisis and recovery period, before rising above initial levels by 2010	35
Table 15: A rise in the consumption of the rich relative to poorer households was seen from 2003 to 2007	36
Table 16: Differences within urban and rural households is a much larger driver of national inequality than differences between them	36
Table 17: The rising population share of Indonesia's middle class	39
Table 18: Budget outcomes and estimates.....	46
Table 19: Balance of Payments.....	46

LIST OF BOXES

Box 1: Global oil price developments and Indonesia	2
Box 2: Nominal investment trends in Indonesia	5
Box 3: A snapshot of the changing patterns of Indonesia's exports	8
Box 4: The case study of the evolution of Bangladesh's food policy	22
Box 5: A brief introduction to growth incidence curves.....	32
Box 6: There are several measures of inequality which seek to capture the distribution of households' economic outcomes.....	35

ABBREVIATIONS AND ACRONYMS

APBN	<i>Anggaran Pendapatan dan Belanja Negara</i> (State Budget)	LDR	Loan-to-deposit ratio
BAPPENAS	<i>Badan Perencanaan Pembangunan Nasional</i> (National Development Planning Agency)	LPG	Liquefied Petroleum Gas
BI	Bank Indonesia	MoF	Ministry of Finance
BKPM	<i>Badan Koordinasi Penanaman Modal</i> (Indonesia Investment Coordinating Board)	mom	month-on-month
BLT	<i>Bantuan Langsung Tunai</i> (cash transfer)	NPL	Non-performing loan
BoP	Balance of Payments	OECD	Organization for Economic Co-operation and Development
BPS	<i>Badan Pusat Statistik</i> (Central Bureau of Statistics)	OMOs	Open market operations
Bulog	National Logistics Agency	PKH	<i>Program Keluarga Harapan</i> (Conditional Cash Transfer)
CDS	Credit default swap	PLN	<i>Perusahaan Listrik Negara</i> (State Electricity Company)
CPI	Consumer price index	PPP	Purchasing Power Parity
CPO	Crude palm oil	qoq	quarter-on-quarter
DIPA	<i>Daftar Isian Pelaksana Anggaran</i> (Program Budget Authorization Document)	RPJM	<i>Rencana Pembangunan Jangka Menengah</i> (Medium-Term Development Plan)
EMBI	Emerging Market Bond Index	RPJMN	<i>Rencana Pembangunan Jangka Menengah Nasional</i> (National Medium Term Development Plan)
EME	Emerging Market Economies	SBI	<i>Sertifikat Bank Indonesia</i> (Bank of Indonesia Certificate)
FDI	Foreign Direct Investment	SSN	Social safety net
FY	Fiscal Year	SUNs	<i>Surat Utang Negara</i> (government securities)
GDP	Gross Domestic Product	SUSENAS	<i>Survei Sosial Ekonomi Nasional</i> (National Household Socioeconomic Survey)
Gol	Government of Indonesia	USD	US dollar
IDR	Indonesian Rupiah	WB	World Bank
IEQ	Indonesia Economic Quarterly	yoy	year-on-year

Executive Summary: 2008 again?

Recent developments raise strong comparisons, but also some notable differences, with 2008

Economic developments over the past quarter bear some strong similarities with the situation seen in the first half of 2008. Most notably, rises in domestic and international commodity prices have again brought with them a variety of risks, both positive and negative, at the macroeconomic and household level.

While oil prices increased sharply with political developments in the Middle East and North Africa, strong price rises have been seen across global commodities. Non-energy commodities, including food, were up 30 percent in the six months to February 2011, similar to the increases seen in the first half of 2008. Many commodity price levels now exceed the highs of 2008. Energy prices however remain lower, although rising oil prices have again focused attention on Indonesia's energy subsidy policies. Similarly, even though international rice prices have been rising, they are well down on the peaks of three years ago. They are also below Indonesia's domestic rice prices, which increased towards end-2010, rather than being above as in 2008.

Growth positively surprised on the upside in Q4...

GDP growth in the fourth quarter of 2010 came in above expectations at 6.9 percent year-on-year, moving growth for 2010 to 6.1 percent. On a seasonally adjusted basis, quarterly growth reached its highest level since the first quarter of 2000. Manufacturing sector growth was particularly notable, agriculture recovered after earlier weather-related disruption and, rounding off this broad-based picture, service sectors continued to show robust gains, particularly in transportation and communications.

On the expenditure-side, year-end fiscal disbursements provided a major boost to growth while the contribution of private consumption declined, likely in part reflecting the impact of food price inflation. Net exports made a further positive growth contribution. Domestic investment rates, dominated by construction, continue to move up, reaching 32 percent of GDP in 2010, above the levels seen prior to the 1997/1998 crisis. Higher relative prices explain much of this dynamic, although real investment rates are also moving upwards.

...and the growth forecast for 2011 has been upgraded to 6.4 percent, rising to 6.7 percent in 2012

Recent trends in the manufacturing and service sectors, plus the commodity-sector engine of growth, support the outlook for 2011. Monthly indicators suggest that private consumption is set to improve. Investment growth should also be enhanced as the Government increases its capital expenditures and FDI continues to flow in. The recent strength of exports is expected to continue. As a result of these drivers, GDP growth is expected to move up to 6.4 percent in 2011, a 0.2 percentage point upward revision on the December 2010 *IEQ* projections, and to reach 6.7 percent in 2012 (Table 1).

Table 1: Growth is projected to rise gradually through 2011 and 2012

		2009	2010	2011	2012
Gross domestic product	(Annual percent change)	4.6	6.1	6.4	6.7
Consumer price index*	(Annual percent change)	2.6	6.3	6.0	6.2
Budget balance**	(Percent of GDP)	-1.6	-0.6	-1.8	n.a.
Major trading partner growth	(Annual percent change)	-1.0	6.6	4.4	4.8

Note: * Q4 on Q4 inflation rate. ** 2011 figure is approved Budget.

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

Rising food price inflation poses a risk to progress on poverty reduction

Inflation in domestic grain prices, primarily rice, reached almost 30 percent year-on-year in December 2010, moving headline inflation up to 7 percent. International rice prices also picked up but remain considerably below the domestic price. More recently, accompanied by the beginning of the rice harvest and imports of rice by the State Logistics Agency, there has been some decline in domestic rice prices. As discussed in Part B, increases in food, and especially rice, prices disproportionately affect poor households, with poverty basket inflation reaching 13 percent year-on-year in December 2010. Indeed, sufficiently large food price shocks can lead to increases in the poverty rate, even in times of robust growth, such as in 2005-06, when poverty went up from 15.7 percent to 17.8 percent, and potentially again in 2011. The experiences of other countries through the 2008 food price

crisis suggest a range of potential policies which can provide well-targeted protection for vulnerable households and maintain and create incentives for producers to help limit future price volatility.

In terms of the future path for inflation, much depends on the domestic rice harvest. The rises and volatility in international commodity prices further complicate the outlook. However, although inflation expectations have risen, there is limited evidence to date of a pick-up in broader prices and core inflation has remained relatively stable. Absent further shocks, inflation is expected to trend downwards to 6 percent year-on-year by Q4 2011.

Financial markets have been focused on inflationary dynamics

Government bond yields rose in early 2011, as in many other emerging markets on rising inflation, and foreign investor portfolio outflows were seen. International drivers were also at play as investors reassessed relative yields and growth prospects. Bank Indonesia subsequently raised its policy rate by 25 basis points in February and has indicated it is maintaining a tight policy bias and is to allow room for further appreciation to dampen imported inflationary pressures. While inflation concerns were the focus of financial markets, the robust banking sector performance and credit growth have followed more closely the positive real sector dynamics.

Records for balance of payment inflows have tumbled

Although the trade performance has been strong, boosted by the commodity and manufacturing sectors, it has been the financial account which has moved balance of payment inflows to record levels. The full-year balance of payment surplus of USD 30.3 billion was almost double the highest 4-quarter inflow recorded. There has been a shifting composition of capital inflows. Portfolio inflows fell back in the fourth quarter while currency and deposit inflows rose. The upward trajectory in FDI inflows merits particular attention. Gross FDI inflows in 2010 were the highest since the 1997/1998 crisis, although remain lower relative to GDP than pre-crisis peaks, and relative to many regional peers.

The fiscal outlook for 2011 depends crucially on the success in improving disbursement rates and on the path for commodity prices

The fiscal deficit for 2010 of 0.6 percent of GDP was well below the revised Budget level of 2.1 percent. Further progress on improving disbursement rates will be particularly important in 2011 as more spending is allocated to capital expenditures. Sustained rises in commodity prices can both boost revenues but also highlight the ongoing fiscal cost of the current subsidy regime, which is not well-targeted to the poor (see the discussion in Part B). Following previous reforms in 2005 and 2008, the Government has signaled its intention to improve the targeting of fuel subsidies, and is currently considering a plan to prohibit private cars from accessing subsidized gasoline.

Near-term risks have risen in line with commodity price volatility

Risks around the baseline outlook have risen, most prominently relating to oil and commodity prices, affecting Indonesia's fiscal balances and trade flows. There is also the risk that further shocks to inflation spill over into rising inflation expectations, general prices and wages. Appropriate policy responses can help to mitigate the likelihood or impact of such shocks and limit their amplification via changes in investor sentiment.

Analysis of longer-term trends points to the changing distribution of expenditures within Indonesia's population

The final section of this *IEQ* provides some new insights into the distributional patterns of growth within Indonesia. Looking at consumption growth over 1996 to 2010 reveals a story of different sub-periods. During the crisis period, all households saw their consumption fall, but significantly more so for the richest households, who also performed worst during the recovery from 1999 to 2003. However, the strong expansion of 2003-2007 was enjoyed primarily by the top half of the distribution. Consumption growth from 2007-2010 was more balanced but again favored the top half. As a result of these trends inequality fell during the crisis and recovery, before rising above initial levels by 2010.

Looking forward, the rise of the middle income class in Indonesia could have profound macroeconomic impact. From 2003 to 2010 7 million people per year entered the middle income class (defined as those with expenditures of USD 2 to USD 20, 2005 PPP, per day). This was mostly due to people migrating from low income into lower middle income groups. In future the expenditures of these individuals will rise and their consumption patterns will change. Spending on durables and services will likely increase, and also savings levels. Demand for public goods is likely to shift to better quality and more sophisticated services in health and tertiary education. Policies will also need to be put in place to meet rising middle class expectations of productive employment opportunities.

A. ECONOMIC AND FISCAL UPDATE

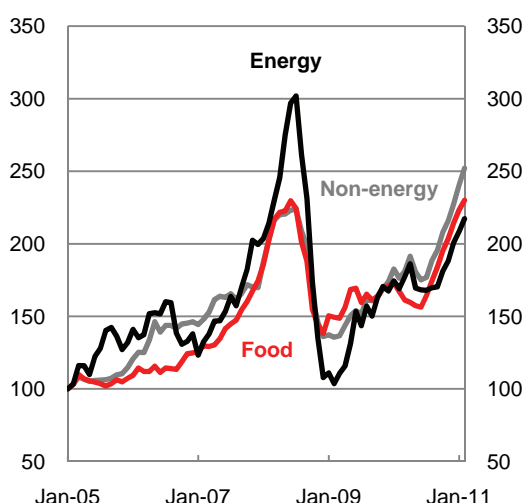
1. Commodity price volatility has dominated recent international developments

While oil prices have moved up sharply on political developments in the Middle East and North Africa, the ongoing rises in global commodity prices have been broad-based

International commodity prices have been rising across the board (Figure 1). The political unrest in the Middle East and North Africa which has unfolded in early 2011 has resulted in a sharp upward movement in oil prices, particularly on the supply disruptions in Libya (Box 1). However, sustained, and broad-based, rises in commodity prices have been seen even without the recent oil price developments.

Non-energy and energy prices rose by 5 and 4 percent respectively in February alone (partly reflecting the depreciation of the US dollar). In the period since November 2010, the increases are 17 and 15 percent respectively. Global food prices are up 13 percent over this period and have reached similar levels in nominal US dollar terms to those seen during 2008 (Table 2). Many non-energy commodity prices are also now above, or close to the peaks seen during 2008. Supply disruptions have clearly been important drivers for these trends, be they weather-related, in the case of agricultural commodities, or political unrest for oil. Other factors include the demand for energy and raw materials, from China in particular, and also the linkages across certain markets, for example, between energy and agricultural prices through biofuels and energy inputs into agricultural production.

Figure 1: Energy and non-energy prices have increased further in recent months
(USD global commodity price index, index Jan 2005=100)



Note: Food is a component of the non-energy index
Source: World Bank

Table 2: Many global commodity prices now exceed the highs of 2008
(Changes in USD global commodity price indices)

	Growth year-on-year in Feb 2011, percent	Difference in Feb 2011 value relative to 2008 peak, percent
Energy	28.5	-28.0
Non-Energy	43.0	9.8
<i>Agriculture</i>	44.2	16.7
Food	37.6	0.1
Grains	47.3	-11.8
Fats & oils	47.4	-3.6
Other food	15.1	20.9
Beverages	29.8	33.4
Raw Materials	69.2	61.2
<i>Metals & Minerals</i>	42.2	3.5
Fertilizers	33.3	-54.6

Note: The month of the 2008 peaks vary by commodity
Source: World Bank

Increasing international commodity prices present both opportunities and risks for Indonesia

Continued rises in global commodity prices present both opportunities and risks for Indonesia (as highlighted in the June 2010 *IEQ* and World Bank, 2010).¹ Given Indonesia's resource wealth, these rises can provide additional impetus to growth, raise the incomes of households involved in commodity sectors and boost related fiscal revenues. The values of oil and coal exports are likely to rise, but also the cost of oil and gas imports. Commodity price increases may also add to domestic inflationary pressures. As discussed in Part B, sustained elevation of oil prices would also increase the burden of the existing fuel subsidy regime. The net macro impact depends not only on the size of the price increases but also on relative price movements, for example, whether oil decouples from other commodities, and on the policy response, such as on subsidies.

¹ World Bank (2010), Boom, Bust and Up Again? Evolution, Drivers and Impact of Commodity Prices: Implications for Indonesia.

Box 1: Global oil price developments and Indonesia

In recent weeks oil prices have risen in line with the political upheaval in the Middle East and North Africa. The largest oil producing country to be affected thus far is Libya where production is likely to be affected for some time to come. This supply disruption, plus concerns around unrest or potential unrest in other countries within the region, has contributed to a rise in oil prices from around USD 75 per barrel in mid-2010 to over USD 110 in early March 2011 (Figure 2).

Sustained higher oil prices would affect Indonesia in many different ways. In terms of direct effects, Indonesia is an oil producing economy, with oil and gas production accounting for roughly 8 percent of GDP in 2010. However, Indonesia has been a net oil importer since 2004, on average producing around 1 million barrels of oil a day, while consuming around 1.3 million. Given the time lags in bringing on stream new oil and gas production, and the uncertainty over the duration of elevated prices, the short-term impacts on the real-side of the economy are expected to be limited.

In terms of the domestic prices, Indonesian consumers are largely sheltered from the direct impact of oil price movements because of the system of subsidized retail energy prices. Deregulated industrial fuel prices mean that there is likely to be a larger effect on economy wide prices as measured by the GDP deflator. If oil prices increase by around 10 percent then the estimated rise in the GDP deflator is around 0.25 percent, while the indirect impact on the CPI, given no policy change with respect to subsidies, is estimated to be quite small in the short-term.

Figure 2: Oil prices have risen sharply
(oil price per barrel, US dollars)

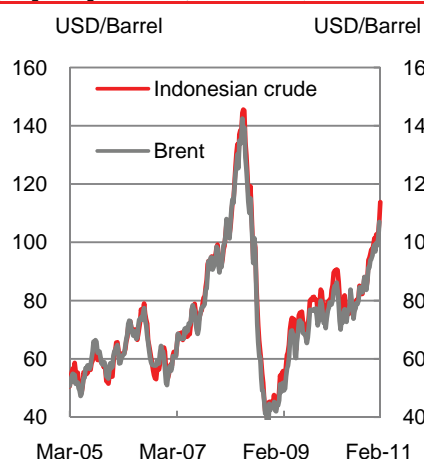


Table 3: Indonesia's oil exposure

	2001	2005	2010
Oil & gas production (percent of GDP)	10.9	11.4	7.8
Oil trade balance (USD billion)	n.a.	-6.5	-8.3
Oil exports	n.a.	9.5	15.4
Oil imports	n.a.	-16.0	-23.7
Oil and gas fiscal balance (percent of GDP)	1.8	0.4	0.6
Revenue	7.2	5.0	3.3
Expenditure	5.4	4.6	2.8

Source: US Energy Information Agency

Sources: BPS, Ministry of Finance, CEIC

Much of the impact of higher oil prices is expected to be on the fiscal side with rising revenues being offset by higher spending on energy subsidies and regional transfers. In 2010 oil and gas revenues were equivalent to around 3.3 percent of GDP while energy subsidies accounted for 2.8 percent of GDP. Historically in Indonesia oil and gas revenues have exceeded spending on fuel subsidies (as well as related regional transfers) apart from years when oil prices are very high. As discussed in Part B, this greater spending on subsidies from higher oil prices can be viewed as a lost opportunity to use the benefits of the higher revenues to fund key developmental priorities.

Note: See also Agustina et al (2008), "Black hole or black gold? The impact of oil and gas prices on Indonesia's public finances", World Bank Policy Research Paper, No. 4718.

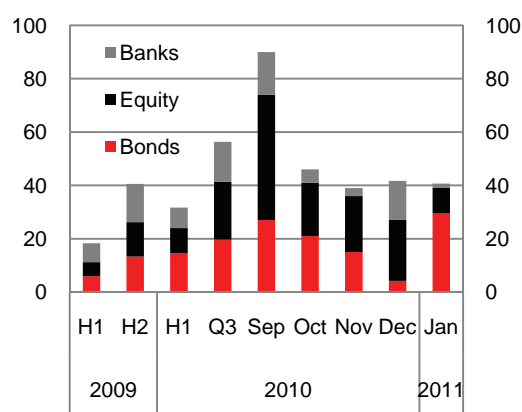
Major trading partner growth has also picked up

In terms of the demand for Indonesia's exports, major trading partner growth fell off in Q3 on a quarterly basis but recovered somewhat in the final quarter of the year. Year-on-year growth has come down to 6.5 percent, as the impact of the rebound from the contractions seen during 2009 unwinds. Major trading partner growth is expected to be 4.4 percent in 2010, moving upwards to 4.8 percent in 2011, both well above the average since 2000.

Capital inflows to emerging markets have moderated since the third quarter of 2010

Managing the growing magnitude of capital inflows into emerging market economies was one of the main policy issues in the second half of 2010 (as discussed in Part B of the December 2010 *IEQ*). Since then inflows have dampened down (Figure 3), although January, which usually sees the front-loading of issuance plans, did see a pick up for bonds. After rising through December, emerging and developing market equities (in US dollar terms) dropped off in January before recovering. As of 7 March they were up 3.7 percent on 1 December 2010 but remained down 1.1 percent on end-2010. Developed market indices continued to rise through January to be up 11 percent on 1 December 2010. Average spreads of emerging market bonds over US treasuries have also shown some volatility, but at 290 basis points on 7 March are around 10 basis points lower than at the beginning of December 2010. These readjustments in prices and positions reflect a number of drivers. A stronger outlook for the US led to some rebalancing of portfolios at year end. Nominal yields in higher income economies have also increased on higher inflationary expectations and rising debt levels. At the same time, inflation risks have risen in many developing economies and, more recently, the oil price turbulence has been associated with increased equity market volatility, which is usually correlated with moves to safer assets.

Figure 3: Emerging market portfolio inflows have retreated from their highs of September 2010
(average monthly capital flows to emerging markets, USD billion)



Note: Bonds and equity indicates new issuance and banks indicates new loans

Source: World Bank DECPG

2. The broad-based growth of Q4 points to a positive outlook for 2011

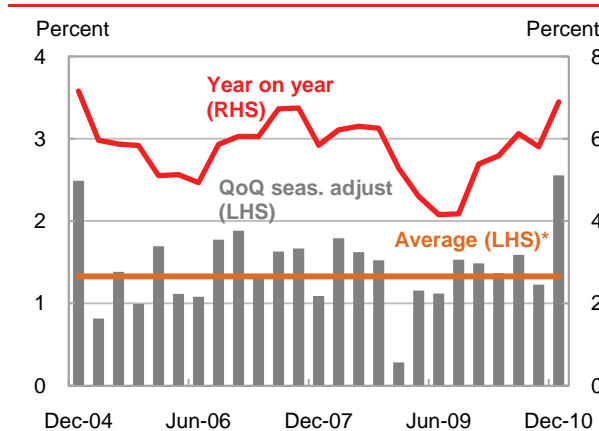
Growth surprised on the upside in Q4 2010

GDP growth in the fourth quarter of 2010 came in above expectations at 6.9 percent year-on-year (Figure 4). On a seasonally adjusted basis, quarterly growth of 2.6 percent was the highest since the first quarter of 2000. The level of GDP moved back above its estimated business cycle trend for the first time since the third quarter of 2008. The strength of the final quarter moved growth for 2010 as a whole up to 6.1 percent, above the December 2010 *IEQ* projection of 5.9 percent.

On the expenditure-side, the year-end saw strong government consumption while private consumption growth dropped back, most likely related to food price rises

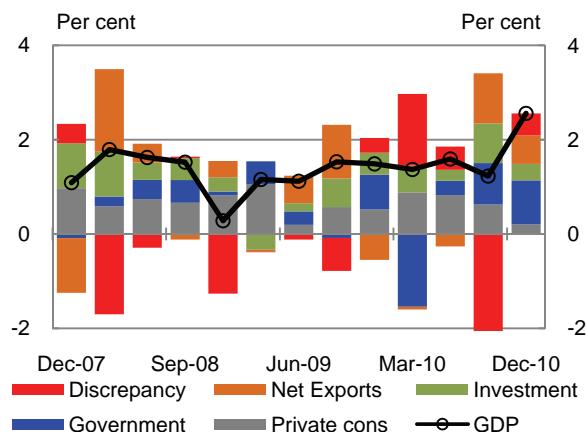
The bunching of fiscal spending towards the year-end saw the contribution of government consumption to growth reach almost half of the 2.6 percent seasonally adjusted quarterly growth in Q4 (Figure 5). In contrast, private consumption growth fell back, likely reflecting the direct impact of domestic food price rises and their spillover to consumer confidence.

Indeed, food consumption, which represents around 45 percent of total private consumption, dropped by almost 0.2 percent in Q4 (seasonally adjusted); the weakest performance since December 2001. Non-food consumption, although up 0.6 percent on the quarter, was still below its 10-year average growth rate. In addition to food price effects on confidence, there was also a larger than expected fall in motorcycle sales in December. This seemed to be related to the softness of consumer finance lending in the final month of the year. However, in January sales rebounded, up almost 30 percent year-on-year. Beyond the near term, consumption is expected to rise further as incomes increase, and the transitory impact of food price shocks dissipates. Further exchange rate appreciation may also boost consumption of imported goods.

Figure 4: Quarterly growth reached recent highs in Q4 2010...*(percentage change in real GDP)*

Note: * Average QoQ growth since Q1 2000

Source: BPS, World Bank seasonal adjustment

Figure 5: ...driven by year-end government spending, net exports and investment consumption*(contribution to quarter-on-quarter seasonally adjusted 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

The contribution of real investment to growth dropped in Q4 but investment accounted for around one-third of growth over 2010 as a whole

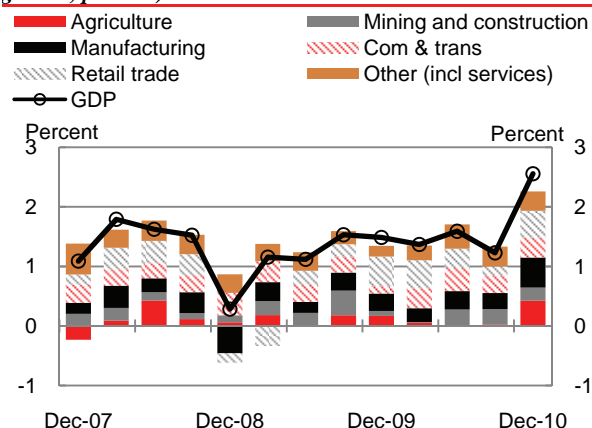
The contribution of real investment to growth dropped slightly in Q4 but was still up 1.5 percent on the quarter. Over 2010 as a whole investment expenditures accounted for roughly one-third of total GDP growth. Construction remains the major investment item, at around 85 percent of nominal investment in 2010, and was up by 1.7 percent quarter-on-quarter seasonally adjusted. However, machinery and equipment are also showing strong growth, both domestic (up 2.9 percent) and from abroad (up 5.3 percent), suggestive of expansions in production capacity. Nominal investment rates in both 2009 and 2010 exceeded 30 percent, and are above the levels seen prior to the 1997/1998 crisis. However, as discussed Box 2 the pattern for real investment is less pronounced.

Net exports continued to make a positive contribution to growth, albeit down slightly on Q3

Supported by commodity demand from China and India and the performance of manufacturing exports, real exports of goods and services grew by 10.2 percent over the fourth quarter (seasonally adjusted). Reflecting rising imports of machinery and capital goods, real imports of goods and services increased by 11.6 percent. The contribution of net exports to growth remained positive, albeit down slightly on that in Q3.

Growth was broad-based on the production-side, coming from both tradable and non-tradable sectors

On the production-side, the growth contribution of tradable sectors picked up. Manufacturing growth was notable; textiles and footwear were strong, along with fertilizers, chemicals, rubber and transport equipment. The weather-related disruptions which affected performance in Q3 appeared to have eased as agriculture output recovered and mining also picked up. Rounding off this broad-based picture, service sectors continued their robust gains, especially in the transportation and communication and retail and trade sectors.

Figure 6: The pick-up manufacturing growth in Q4 was notable*(contribution to quarter-on-quarter seasonally adjusted growth, percent)*

Source: BPS, World Bank seasonal adjustment

Box 2: Nominal investment trends in Indonesia

Indonesia's nominal investment reached 32 percent of GDP in 2010, higher than the level immediately prior to the 1997/1998 crisis. Indonesia's nominal investment ratio is now on par with India, and within regional comparators, only China has a significantly higher rate. Rising investment rates may signal increased confidence in future returns. Higher investment in productive capital can promote future growth, bringing with it jobs and rising incomes, promoting poverty reduction. However, the nominal investment rate is not necessarily the best measure to focus on when thinking about these outcomes.

Table 4: Indonesia's rising nominal investment rate (percent of GDP)

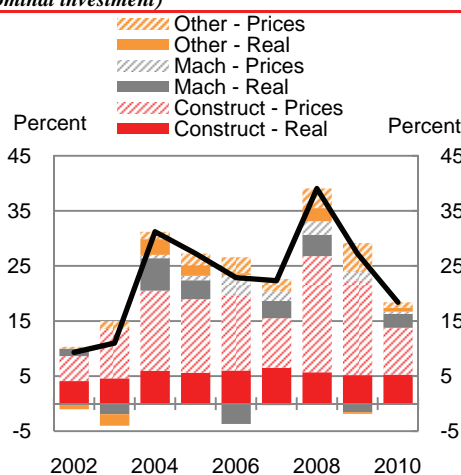
	1996		2000		2009	
	Nom.	Real	Nom.	Real	Nom.	Real
China	34	n.a.	34	34	46	43
India	23	22	23	23	32	31
Indonesia	30	27	20	20	31	23
Philippines	42	39	25	25	20	21
Thailand	23	21	21	21	15	15
Vietnam	41	47	22	22	24	23

Note: Nom. indicates nominal investment-to-GDP. Real ratios are in 2000 constant prices

Source: World Development Indicators

Looking at the real investment rates, i.e. comparing levels of real investment and real GDP, the picture is somewhat different. The rise in Indonesia's real investment share since 2000 was around one-fifth, still notable but well below the rise for the nominal rate. This differential in the nominal and real investment rate trends is higher than other countries within the region.

Figure 7: Rising construction prices playing a key role in the increase in nominal investment
(percentage point contribution to annual growth in nominal investment)



Source: BPS and World Bank

that are increasing the relative price of investment, for example, through congestion costs.

Based on this limited sample, the strength of the divergence between the real and nominal investment-to-GDP ratio appears to be an Indonesia-specific phenomenon. Another possibility therefore could be that the measured investment deflator is overestimating investment price increases. If this is the case, and the "true" investment deflator is in fact lower, then the real series would be much closer to the nominal series, similar to the pattern in other countries. Taking this argument one step further, and assuming that the "true" real ratio is higher and more comparable to countries such as India which has the same nominal ratio, the question would then be why Indonesia is not growing at similar rates. This may be related again to some of the constraints above, such as inadequate infrastructure, resulting in lower returns for a given level of "real" investment.

The difference between the nominal and the real investment share can be partly explained by the measured price of investment growing faster than prices in the aggregate economy, or the GDP deflator (it can also reflect changes in the composition of investment). Figure 7 decomposes the annual growth of nominal investment and shows that much of its rise has been due to increases in construction prices, while most other components have been relatively stable. Cement price increases have been particularly important (see the June 2010 *IEQ*). While international raw material prices have increased over time, their growth patterns do not match that of domestic construction prices and given that the differential in nominal and real investment is not a regional phenomenon, the likely explanation is a domestic price story. Further investigation is needed to come to a definite conclusion on the drivers of this trend. Possible explanations could lie in capacity constraints or infrastructure constraints and investment climate issues

The growth trends in investment (and positive FDI momentum), in the manufacturing and certain services sectors, plus the commodity sector's support for growth, are positive for the economic outlook

Under the baseline scenario, investment strength is set to be supported by the shift in government spending towards capital expenditures and the real impact of the recent FDI upsurge. The growth trends in the manufacturing and service sectors, plus the commodities sector contribution to growth, will also support the outlook for 2011. The recent strength of exports is expected to continue, with the contribution of net exports in 2011 increasing. As a result of these drivers, under a baseline scenario GDP growth is expected to move up to 6.4 percent in 2011, a 0.2 percentage point upward revision on the December 2010 IEQ projections, and to reach 6.7 percent in 2012 (Table 5).

Table 5: Aggregate GDP projections for 2010 and 2011 have been upgraded
(percentage change, unless otherwise indicated)

	Annual			Year to December quarter			Revision
	2010	2011	2012	2010	2011	2012	2011
1. Main economic indicators							
Total Consumption expenditure	4.0	5.2	6.1	4.9	4.9	5.8	-0.3
Private consumption expenditure	4.6	4.7	4.9	4.4	5.8	4.3	-0.4
Government consumption	0.3	8.8	13.6	7.3	0.5	13.4	0.2
Gross fixed capital formation	8.5	10.0	10.2	8.7	10.6	10.3	0.0
Exports of goods and services	14.9	11.7	12.4	16.1	7.3	12.6	1.4
Imports of goods and services	17.3	12.2	13.2	16.9	7.2	14.8	1.8
Gross Domestic Product	6.1	6.4	6.7	6.9	6.0	6.9	0.2
Agriculture	2.9	3.6	4.5	3.8	2.0	0.0	0.2
Industry	4.7	5.1	5.3	5.3	4.6	0.0	0.1
Services	8.4	8.3	8.6	9.2	8.2	0.0	0.3
2. External indicators							
Balance of payments (USD bn)	30.3	16.6	14.8	n/a	n/a	n/a	5.4
Current account balance (USD bn)	6.3	2.3	2.7	n/a	n/a	n/a	4.2
Trade balance (USD bn)	21.6	17.2	18.3	n/a	n/a	n/a	6.3
Financial account balance (USD bn)	26.2	14.0	11.8	n/a	n/a	n/a	1.2
3. Other economic measures							
Consumer price index	5.1	6.3	6.2	6.3	6.0	6.2	-0.1
Poverty basket Index	8.6	8.3	7.0	11.7	5.7	7.8	-0.2
GDP Deflator	8.0	9.4	10.3	8.0	10.1	11.1	-0.6
Nominal GDP	14.6	16.4	17.8	15.5	16.7	18.8	-0.5
4. Economic assumptions							
Exchange rate (IDR/USD)	9074	8900	8900	8977	8900	8900	-100.0
Interest rate (SBI, 1 month)	6.4	7.0	7.5	6.5	7.3	7.5	0.5
Indonesian crude price (USD/bl)	79.4	90.0	90.0	86.2	90.0	90.0	14.7
Major trading partner growth	6.6	4.4	4.8	6.0	4.9	4.8	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 projections

3. Balance of payment inflows reach record levels

Indonesia's exports have been lifted by the rising tide of global commodity prices and emerging market demand

Indonesia's export mix, both in terms of partner countries and commodities, has evolved over recent years in response to global commodity trends and demand from emerging economies, particularly China (Box 3). With rising prices offsetting slowing volumes growth, Indonesia's nominal exports continued to record strong, broad-based growth, up 32 percent year-on-year in December 2010, dropping slightly to 25 percent in January

2011. Recently export growth has been seen across the board but was particularly strong in oil & gas, copper, rubber, palm oil, papers, and electronics. Manufacturing exports are making the largest contribution to year-on-year export growth, despite the concerns over the impact of the real strength of the Rupiah over the past year on their competitiveness.

Figure 8: The recent rise in exports has been broad-based across products
(export value, 3-month moving average, USD billion)

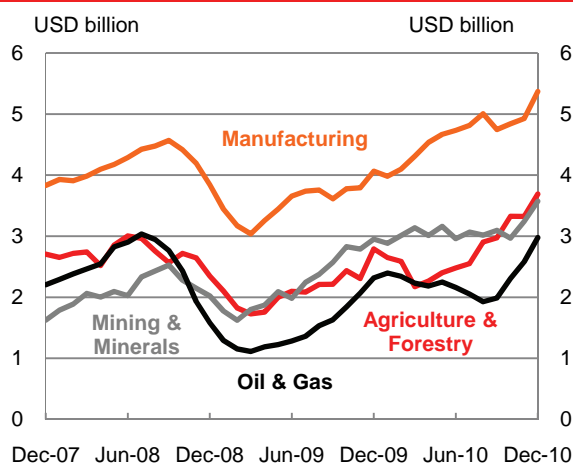


Table 6: Balance of payments inflows to fall off the record highs of 2010 but to remain strong
(USD billion)

	2008	2009	2010	2011	2012
Overall Balance of Payments	-1.9	12.5	30.3	16.6	14.8
Current Account	0.1	10.2	6.3	2.3	2.7
Trade	9.9	20.5	21.6	17.2	18.3
Income	-15.2	-15.1	-20.3	-20.4	-21.1
Transfers	5.4	4.9	5.0	5.5	5.6
Capital & Financial Accounts	-1.8	5.0	26.2	14.3	12.1
Capital Account	0.3	0.1	0.0	0.2	0.2
Financial Account	-2.1	4.9	26.2	14.0	11.8
FDI	3.4	2.6	9.8	9.9	10.7
Portfolio	1.8	10.3	15.2	8.9	7.6
Other	-7.3	-8.1	1.1	-4.8	-6.4
Reserves^(a)	51.6	66.1	96.2	98.0	

Source: BPS

Note: Errors and omissions not shown
Source: BI

Despite rising imports, the strength of exports pushed the trade balance for 2010 higher than previously expected

Capital goods and intermediates remain the main drivers of import growth, contributing roughly one-third and two-fifths respectively to growth of 34 percent year-on-year in Q4 2010. But, with exports surprising on the upside, the goods trade balance for 2010 came in slightly higher than expected at the time of the December 2010 *IEQ*. The latest numbers for January 2011 showed a slight drop in the trade surplus to USD 1.9 billion from USD 3.7 billion in December as export growth slowed relative to that of imports.

The current account surplus of USD 6.3 billion over 2010 was slightly lower than previously projected, primarily reflecting higher income outflows. The services deficit remained stable, but the transportation deficit (around two-thirds of the services deficit) is on the rise, again reflecting the influence of the commodity sector as service payments rise with export shipments.

However, it has been the financial account which has led records for balance of payments inflow to tumble

The overall balance of payments surplus in 2010 of USD 30 billion was more than double that in 2009 (Table 6). Although the current account narrowed, net capital and financial account inflows surged to USD 26 billion, five times the level in 2009. Portfolio inflows played a major role although there has been a shifting composition of inflows over the year. Portfolio inflows fell back in the fourth quarter while inflows of currency and deposits increased.

The upward trajectory in FDI has attracted particular attention and opens the possibility of a structural rise in inflows. Net FDI inflows of USD 9.8 billion over the year, of which one third were seen in Q4, were almost three times the pre-crisis 2008 level. Strong foreign investment numbers, up 52 percent on 2009, were also posted by the investment agency, BKPM, who forecast a further 22 percent rise in 2011. However, the ratio of FDI to GDP remains below its pre-crisis peak and below many regional peers. Nevertheless, the outlook is also supported by anecdotal evidence of new investment projects and country agreements, for example, with Japan, India, Singapore, China, Korea and the US.

Box 3: A snapshot of the changing patterns of Indonesia's exports

Over the past five years, Indonesia's export markets, and those of other countries within the region, have shifted away from developed economies and towards China, India and other emerging markets. The export share going to the US and Japan has fallen from 33 percent in 2005 to 25 percent in 2010 (Table 7) – while the export share to China and India has increased from 11 percent to over 16 percent. This shift towards reflects emerging economies' increasing share of external demand and supported Indonesia's exports during the developed economy downturn during the global recession.

Table 7: Rising importance of intra-regional trade for East Asian economies
(share of total merchandise exports, percent)

a) 2005							
	IDN	JPN	KOR	MYS	SGP	THA	VNM
US	11.5	22.5	14.5	19.6	10.2	15.3	18.3
EU	7.8	14.7	15.4	11.7	12.0	13.6	17.0
Japan	21.1	x	8.4	9.3	5.5	13.6	13.4
China	7.8	13.5	21.8	6.6	8.6	8.3	9.9
East Asia*	24.0	12.7	21.4	44.3	54.1	22.0	22.3
Other	27.8	36.6	18.5	8.5	9.6	27.2	19.1
b) 2010							
	IDN	JPN	KOR	MYS	SGP	THA	VNM
US	9.3	15.4	10.7	9.5	6.4	10.3	21.0
EU	7.5	11.3	11.5	10.7	9.8	11.2	16.2
Japan	16.0	x	6.0	10.4	4.7	10.4	10.8
China	9.8	19.4	25.1	12.6	10.3	11.0	9.1
East Asia ⁽¹⁾	24.8	14.7	23.6	46.3	56.7	22.7	21.0
Other	32.5	39.2	23.1	10.5	12.0	34.3	21.9

Note: * Excludes China and Japan. ** Data for 2009. IDN: Indonesia; JPN: Japan; KOR: Korea, Rep.; MY: Malaysia; SGP: Singapore; THA: Thailand; VNM: Vietnam.

Source: BPS, CEIC

While the dynamics of export destination have been similar across East Asia, a different picture emerges in terms of products. Indonesia has seen commodities rise further in their importance. This reflects both commodity price effects and rising volume demand from emerging economies, both as inputs to final goods and for domestic investment and power generation. The share of manufactured exports has dropped from 43 to 37 percent over 2005 to 2010. Countries with strong resource endowments or processing facilities, such as Malaysia and Singapore, have seen a similar shift. This reorientation of Indonesia's exports – by destination and by products– should support continued solid near-term export growth, as rising prices and stronger relative demand from developing economies supports mining and minerals exports.

Table 8: Shifting share towards export commodities for Indonesia
(share of total merchandise exports, percent)

a) 2005							
	IDN	JPN	KOR	MYS	SGP	THA	VNM
Agriculture and Foods	19.0	0.5	1.1	6.9	1.6	8.9	14.5
Mining and Bulk Commodities	15.8	1.1	1.0	2.7	0.6	1.8	36.1
Mineral Fuels	22.4	0.7	5.5	13.2	15.0	-	-
Manufacturing	42.8	85.8	92.4	75.0	81.7	87.8	49.4
o/w Capital & Transport	15.9	23.2	61.1	54.0	58.8	-	-
Other	-	11.8	0.1	1.7	1.1	-	-
b) 2010							
	IDN	JPN	KOR	MYS	SGP	THA	VNM *
Agriculture and Foods	21.3	0.6	1.1	11.4	1.8	10.8	15.8
Mining & Bulk Commodities	24.3	1.4	1.2	2.9	0.6	0.9	29.4
Mineral Fuels	17.8	1.6	7.0	16.3	22.9	-	-
Manufacturing	36.6	84.4	90.1	68.7	72.8	88.3	50.3
o/w Capital & Transport	12.5	22.6	56.5	44.4	50.4	-	-
Other	-	11.9	0.7	0.7	1.9	-	-

Note: * Data for 2009 (data not sum to 100).

Source: BPS, CEIC

Looking forward, the upward trend in FDI and commodity exports suggest further strong inflows to the balance of payments

Looking forward, the upward trend in FDI and commodity exports suggest further strong balance of payments inflows for 2011 although at lower levels than the highs of 2010. Rising commodity prices have contributed to an upward revision in the World Bank current account forecasts for 2011 and 2012. However, the trade surplus is still expected to narrow in 2011, with import growth outpacing that of exports. On the financial account, portfolio flows are expected to come off the highs of 2010, as the gap in relative yields falls, with FDI rising steadily. Recent movements in energy and commodity prices and the uncertainty in the global environment still leave ample uncertainty around the baseline overall balance of payments projection.

4. Commodity price rises increased headline inflationary pressures

Headline inflation accelerated sharply towards the end of 2010 and beginning of 2011 driven largely by food price increases

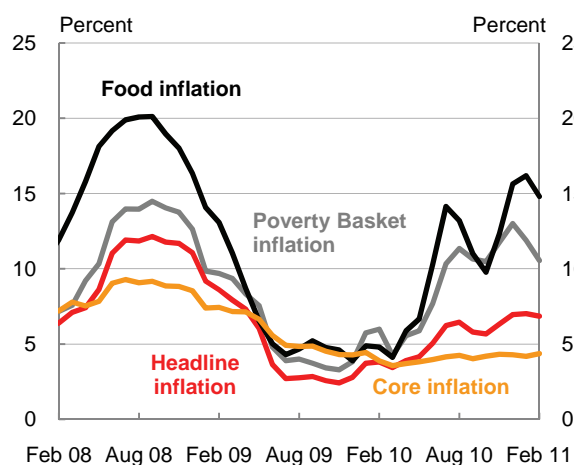
Headline inflation rose to 7 percent year-on-year in December, outside BI's target band of 5 plus or minus 1 percent. Volatile food items dominated most of the recent inflation dynamics (Figure 9). Raw food price inflation reached 16 percent year-on-year in December and January driven by rice price increases.

The divergence in trends in food and non-food inflation has also been seen in other developing economies. With food a larger share of the consumption basket in such countries than in higher income countries, the pickup in inflation seen recently has been more pronounced. According to World Bank estimates, the median year-on-year inflation for developing countries rose from 3 percent in September to 6 percent in December 2010. Within these headline figures, non-food prices increased at an annualized rate of 3.2 percent during the three months to December 2010. In high-income economies the corresponding rise in the headline rate was from 2 percent to 2.6 percent.

Recent rice price increases have particularly affected the purchasing power of the poor

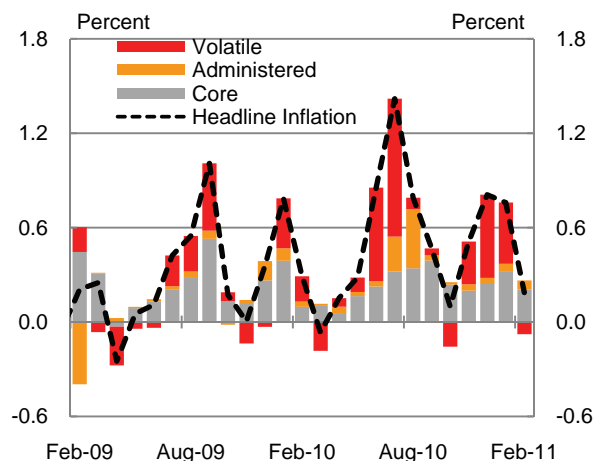
The rise in food prices seen from mid- to end-2010 may counter the impact of higher incomes on progress in poverty reduction (see Part B piece). Indeed, the impact on the lower income segments of the population can be seen in the different movements of two consumer confidence series. On the one hand Bank Indonesia's (BI) consumer confidence measure has moved upwards, consistent with real-sector performance. On the other hand, Danareksa's confidence measure, which includes a lower income sample, has been trending downwards in line with higher food price inflation (for more details see the September 2010 *IEQ*). When thinking about the overall impact of food price rises, and commodity prices more generally, it is also important to consider the potential rises in incomes that that may be realized for those involved in commodity sectors.

Figure 9: Poverty basket inflation moved upwards with the rise in food price inflation...
(year-on-year growth)



Source: BPS and World Bank

Figure 10: ...but February saw a fall back in the monthly rate of CPI growth as food prices stabilized
(contributions to monthly inflation)



Source: BPS and World Bank

Domestic food prices stabilized in February

Headline inflation has come down slightly with the retreat in food price inflation in February (Figure 10). Rice prices declined as the harvest has started to come in and imported rice has been released by Bulog, the State Logistics Agency. The Government has also taken action to address concerns over rising prices of other food items, for example, by temporarily suspending import tariffs, for example, on soybean and wheat, and announcing increased spending on VAT subsidies on cooking oil for the poor.

Evidence for spillovers into other consumer prices has been limited although inflation expectations have risen

Evidence of spillovers of food price inflation into other prices has been limited. Core inflation, a useful measure of underlying consumer price movements, which excludes volatile and administered items, has remained within the range of 4 to 4.4 percent year-on-year since July 2010. However, rises in food prices and the headline rate have led to a pickup in inflation expectations. It is noticeable that the move up in domestic inflation expectations has been gradual, broadly in line with the food price rises. In contrast, the Consensus forecasts of professional forecasters (primarily foreign investors) for average inflation in 2011 were readjusted sharply after December's higher inflation outturn. In January the average forecast for 2011 inflation moved up 0.4 percentage points on the month to 6.5 percent and was raised to 6.8 percent in the February survey. At the same time, the variation around the higher forecast has declined.

General price movements continue to surprise on the low-side

General price movements continue to surprise on the low-side. GDP deflator inflation was 8 percent year-on-year in Q4 2010 and for 2010 as a whole, slightly down on the level in 2009. As a result the gap between the GDP deflator and CPI inflation figures narrowed to 1.7 percentage points in Q4 2010, down from a recent high of 10 percentage points in Q2 2008. Looking across the domestic expenditure components, the growth of the GDP deflators are down on the average rate of the past five years (with the gap most marked for the investment prices deflator). However, some of the production sectors with particularly strong recent growth, for example, transport and communication, have seen rates of price increases above their recent historic averages.

The near-term outlook for prices is finely balanced, with the performance of the domestic rice harvest particularly important

The upside and downside drivers of inflation are finely balanced but the baseline projection is for a downward trend over 2011 as domestic food price shocks are expected to unwind. The ongoing strength of the exchange rate and core inflation stability are also factors behind this projection. Based on these factors CPI inflation is projected to fall to 6 percent by the end of 2011. Inflation for 2011 as a whole is expected to be 6.3 percent and 6.2 percent for 2012. However, forecasting inflation in the current environment is complicated by uncertainty over the strength of the domestic rice harvest and the ongoing upward movements, and volatility, in international commodity prices. Another key unknown is how inflation expectations will respond to Bank Indonesia's policy decisions over coming months. In addition, no adjustments to the fuel subsidy policy are assumed in these projections, but if reforms are implemented then the impact on inflation would depend crucially on their nature and could range from limited to substantial.

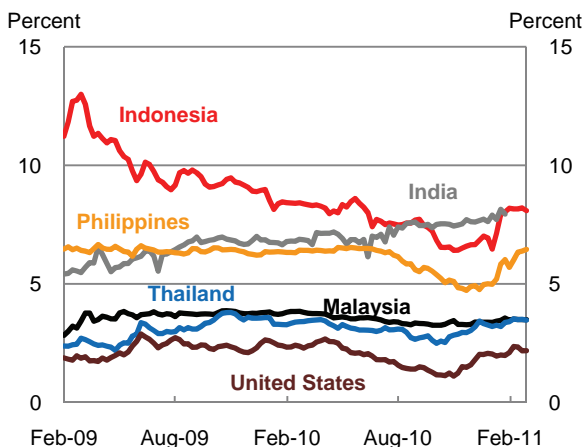
In terms of the general price level, the rate of increases in the GDP deflator is projected to rise to 9.4 percent in 2011 and 10 percent in 2012. This reflects the positive growth outlook and potential for additional price pressures to emerge as capacity limits begin to bind, for example, related to infrastructure constraints.

5. Portfolio inflows moderated in early 2011 as bond and equity prices corrected

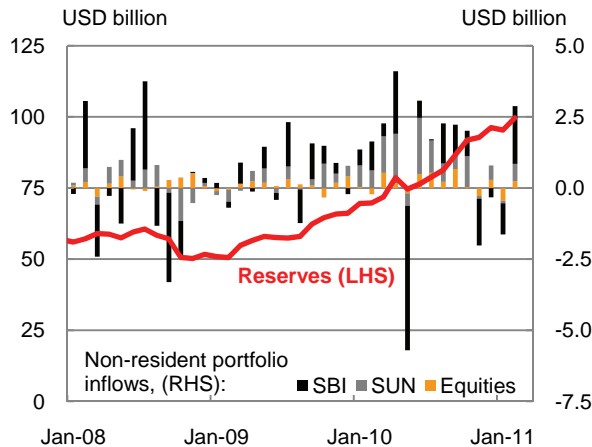
Equity and bond prices declined in early 2011 but have since recovered and non-resident portfolio inflows resumed in February

Inflationary concerns, driven mainly by rising domestic food prices, contributed to increases in nominal local government bond yields across many markets in early 2011 (Figure 11). The rise in yields in Indonesia was relatively sharp, with the five-year yield moving from 6.8 percent at end-December to 8.5 percent in mid-January before coming down to around 8 percent in early March. Equity markets were also affected but similarly recovered. Indonesia's composite index is down 1 percent on early December 2010 but remains up 40 percent since the start of 2010.

These asset price movements are reflected in the ebb and flow of non-resident portfolio inflows. After outflows in November and January, there were strong inflows in February (Figure 12). Non-resident investor holdings of SBIs, the most volatile of flows, rose by USD 2 billion over February to USD 7.1 billion (32 percent of the total outstanding). Holdings of government securities picked up, reaching USD 22.7 billion, and there was also a gradual rise in equity holdings, which stood at USD 128 billion at end-February.

Figure 11: Nominal bond yields rose in early 2011 in many countries*(Local currency government 5-year bond yields, percent)*

Source: CEIC and World Bank

Figure 12: After a weak few months, non-resident investor portfolio inflows returned in February*(non-resident investor portfolio inflows USD billion; international reserves, USD billion)*

Note: "Flows" for SUN (government securities) and SBI (BI certificates) indicate changes in holdings

Source: BI and CEIC

Much of the financial market focus in the past three months has been on inflation dynamics...

After the focus on capital inflows during the second half of 2010, the attention of investors turned increasingly towards rising inflationary outcomes, and the appropriate policy response. BI raised the policy rate by 25 basis points in February to hold down inflationary expectations given rising commodity and food prices. BI has indicated that it is maintaining a tight policy bias and is to allow further room for appreciation in the exchange rate to also dampen imported inflationary pressures. In addition, BI had previously used a range of tools to tighten liquidity conditions. For example, the reserve requirements on rupiah deposits increased in November and are to increase in two steps for foreign currency deposits from March to June 2011.

...although other domestic and external drivers were at play

However, other domestic and international factors also contributed to the patterns of portfolio flows and asset prices. These include the aforementioned international factors, such as a reassessment of relative yield, inflation and growth prospects. These common factors can be seen in, for example, similar dips in net equity market purchases by non-resident investors in Korea and Philippines. On the domestic-side, the fall in non-resident holdings of SBIs through end-January must be seen within a declining overall stock.

Looking forward, the positive trend in Indonesia's sovereign credit rating may provide support for further inflows. Fitch recently upgraded the outlook on its rating, which is currently one notch below investment grade, to positive and Moody's has moved its rating to a similar level. Indonesia's equities also tend to be move together with international commodity prices which, as emphasized above, are moving upwards.

Reserves continue to accumulate

After dropping over January, when portfolio capital outflows were seen, reserve accumulation has resumed. In February, international reserves rose by USD 4.3 billion alone and in early March reached over USD 100 billion. Notwithstanding this build up of reserves, the exchange rate has appreciated against the USD, by 2.5 percent over the month of February. This is in line with BI's policy signals and renewed portfolio inflows but also reflects general dollar weakness as seen in similar appreciations for other regional currencies.

Monetary growth rates picked up at end-2010

The rate of growth of broad money has risen gradually, reaching 17 percent year-on-year at end-January 2011. Narrow and base money picked up faster with the latter jumping up following November's increase in reserve requirements from 5 to 8 percent. Since end-December base money has fallen, and also the outstanding stock of open market operations (OMOs). Within this stock, there has been a marked shift in composition since mid-2010. First, the maturity of SBIs has lengthened as BI followed its November

suspension of the auction of 3-month SBIs with the suspension of 6-month issuance from February. Second, the overall stock of SBIs has also fallen with term deposit facilities accounting for an increasing share of outstanding OMOs.

Real sector strength is supporting robust overall banking sector indicators

The macroprudential indicators of the banking sector are broadly unchanged since the December 2010 *IEQ* and remain solid. The non-performing loan ratio has continued to decline, reaching 2.6 percent at end-2010, and the capital adequacy ratio ended the year at 17.2 percent. In December BI announced a package of 23 policy measures covering five key areas, for example to strengthen macroprudential policies and improve bank resilience. These included the aforementioned rise in the foreign currency minimum reserve requirement as well as a limit on short-term foreign borrowings to a maximum of 30 percent of the banks' capital.

Another of BI's earlier policy adjustments, namely the target range of 78 to 100 percent for commercial bank loan-to-deposit (LDR) ratios, announced in September 2010, became effective in March 2011. As of December, the overall LDR was 75 percent, down slightly on 78 percent in September but up on early 2010, and three of the major banks did not then meet the minimum level. For these banks, who focus primarily on servicing a growing depositor base, the penalties for not meeting the range, in terms of higher statutory reserve requirements, may well be preferable than rapidly expanding their lending given the potential impact on credit quality.

Working capital loans continue to be the dominant contributor to loan growth, in line with investment trends

The strength in the real economy is supporting the upwards trend in real and nominal loan growth. Working capital loans contributed just over half the nominal loan growth of 23 percent year-on-year in December 2010, with real loan growth at 15 percent, up from 5 percent at the start of 2010. Lending rates are also coming down gradually, to 13 percent nominal and 6 percent real, ex post, at end-2010. At the same time the rate differentials between banks with the highest and lowest lending rates and the net interest margin have moved downwards. At the end of March BI's new lending rate disclosure requirements are to take effect whereby larger banks will likely be required to disclose their rupiah prime lending rates for corporate, retail and consumer loans to facilitate greater transparency in available rates and competition.

6. Rising commodity prices and prospects for disbursement rates are the main uncertainties for the fiscal outlook in 2011

The budget deficit in 2010 was lower than expected, at 0.6 percent of GDP

Relatively stronger revenue and weaker expenditure realization resulted in a lower fiscal deficit of 0.6 percent of GDP in 2010 compared with the revised budget level of 2.1 percent of GDP. As in previous years, the budget outcome was markedly influenced by end of year performance. In the 11 months to November the budget was in surplus of IDR 16 trillion which turned into a deficit of IDR 39.5 trillion by end-December. Around 18 percent of total revenues came through in December (Figure 13) and 22 percent of total spending, including transfers.

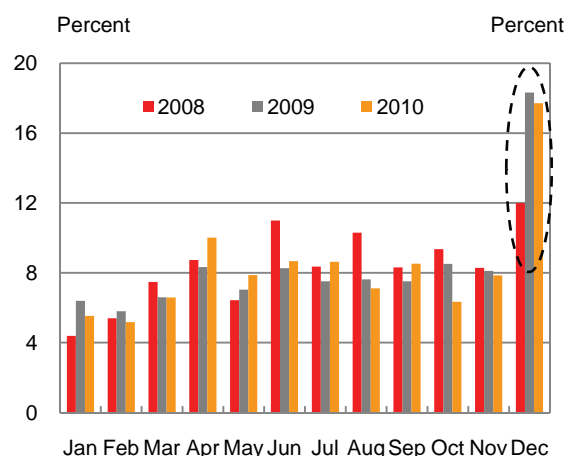
Oil and gas revenues and a temporary correction to VAT revenues boosted year-end revenues in 2010

Total revenues increased by 19 percent in 2010 in nominal terms. Tax revenues rose by 20 percent with non-tax revenues up 18 percent (of which the oil and gas share rose by 21 percent). Tax revenues were affected by the cut in corporate and personal income taxes in 2010. However, in the absence of a counterfactual and stable sample of taxpayers, it is difficult to assess the net impact on tax collection.

The full-year revenues were surprisingly strong, relative to projections based on performance in the first eleven months of the year. Much of this unexpected strength in December was due to VAT revenues along with some strength in oil and gas revenues. Lower collections in the month of December for the profit transfer of SOEs, one of the more volatile revenue categories, partly offset these impacts.

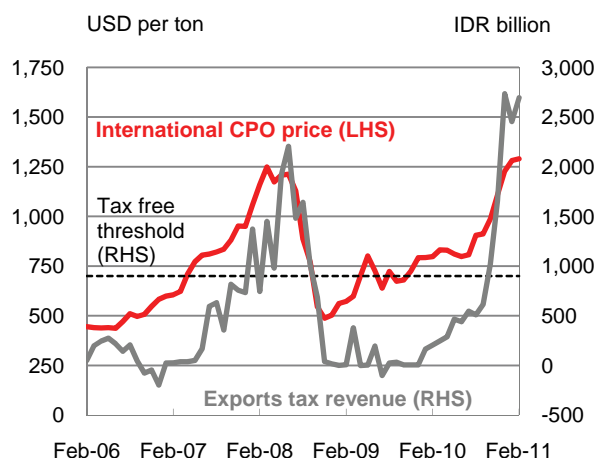
The VAT strength related to the payment of arrears on fuel subsidies that amounted to IDR 24 trillion. These payments cover the periods 2003-2005 and November to December 2009. Although paid in 2009, they were not recorded in the budget realization figures at the time. The decision to record them in December 2010 figures followed a recommendation from the BPK The Indonesian Supreme Audit Agency which was subsequently accepted and approved by the Indonesian parliament. This revenue surprise is very similar to the one that occurred in December 2009.

Figure 13: Revenues were strong in December 2010
(Monthly percentage split of total revenue realization)



Source: MoF and World Bank

Figure 14: Export taxes, although a small share of revenues, have risen with CPO prices
(CPO price per ton USD; export tax revenues, IDR billion)



Source: MoF and World Bank

Looking forward to 2011, World Bank projections of revenue growth have been revised upwards

World Bank projections for nominal revenue growth have been revised upwards for 2011. This reflects a growth off a stronger-than-expected base from 2010 and also higher commodity prices. The latter affect not only oil and gas-related revenues but also, for example, export duties, which predominantly relate to duties on crude palm oils (CPO). CPO duties move up on a sliding scale with prices (see the June 2010 *IEQ*). As CPO prices have hit highs, export duty collections have followed suit (Figure 14), although they remain only 1 percent of total revenues.

There are no new major announcements to date on revenue policies for 2011. The Ministry of Finance's did announce a February policy package including, for example, raising the threshold for VAT on houses to IDR 70 million from IDR 50 million and eliminating VAT on cooking oil for the poor. However, the overall revenue impact is expected to be minimal. The Government has also indicated that it is considering the potential role of tax incentives for various key industries but, without the implementing regulation, it is not possible to project either the size or the direction that such tax incentives may have on tax collection.

On the expenditure-side, again disbursements fell substantially below the budget levels...

The expenditure realization in 2010 was 94 percent of the total revised budget figure or 91 percent excluding transfers (Figure 15). Although in nominal terms spending in 2010 was 12 percent (or IDR 63.3 trillion) higher than the 2009 realized levels, the disbursement rates relative to the revised budget remained at similar levels. The absorption capacity of core spending (salary, materials and capital expenditures) worsened, suggesting that challenges with budget execution remain (see Part B of the December 2010 *IEQ*).

Figure 15: Overall disbursements rates were little improved on 2009
(actual spending as percent of revised Budget, percent)



Note: CG – Central government
Source: MoF and World Bank

Some of the reforms which were introduced to address this issue in 2009 and 2010 will only be effective in 2011. In addition some technical regulation and dissemination may be required for the reforms to be effective. Other factors behind the underspending include weather-related impediments for some infrastructure projects and the fact that the budget allocated for bureaucratic reform in six line ministries was not fully realized.

In contrast to this underspending, spending on non-energy subsidies came in 27 percent higher than the revised Budget. This reflected mainly the payment of VAT on subsidized fuels for 2009 and 2010 and the payment of the 13 month Raskin (rice for poor) program.

... and the skewness of spending towards the year-end persists

In parallel with the continued underspending in 2010, skewed spending patterns towards the end of the year persist. In particular 37 percent of the realized capital expenditures for the year were spent in December, compared with 32 percent in 2009. For 2011 the Government is said to be targeting the execution of 20 percent of budget spending during the first quarter. Although it is only two month of data, the figures through February indicated that cumulative central government spending (excluding transfers) was at 6 percent of the budget. This follows closely previous years' spending levels.

The success of previous reforms aimed at improving disbursement rates are crucial to 2011 spending given the proposed reallocation towards capital expenditures

The approved Budget deficit for 2011 is 1.8 percent of GDP, IDR 125 trillion, and is around three times the outturn deficit in 2010. In 2011, the Government has increased the budget allocated to infrastructure and social assistance. The allocations to capital and materials expenditures are 43 percent and 22 percent higher respectively than in the revised 2010 budget. Personnel expenditures are expected to rise by 11 percent relative to the 2010 revised budget, reflecting a proposed 10 percent salary increase and 13 month salary payment plus a budget allocation for additional agencies undertaking bureaucratic reform. The energy subsidy expenditure allocation in the 2011 budget was down slightly on the 2010 revised budget level. However, as discussed in Part B, actual spending relative to budget will depend upon the oil price relative to the assumption of USD 80 per barrel and the nature of any reforms that may be implemented over the year.

The reallocations and expansions of spending towards infrastructure and social spending are welcome in terms of addressing some of Indonesia's key development needs. However, achieving these spending levels, particularly on capital expenditure, requires addressing the aforementioned disbursement issues. Failure to move forward in these areas risks even greater aggregate under-spending. For example, some of the key line ministries receiving significant budget increases are those who underspent significantly in 2010, such as the Ministry of Public Works or the Ministry of Energy and Mineral Resources (Table 9).

Table 9: Some line ministries receiving substantial expenditure increases in 2011 had low disbursement rates in 2010 (top ten line ministries/agencies by 2011 budget allocation)

Line ministry / agency	2011 Budget expenditures (IDR trillion)	Percent of total*	Under-spend in 2010 relative to revised Budget	Increase in allocation in 2011 budget relative to 2010 revised Budget (percent)
Public works	58.0	13.4	14.5	60.6
National education	55.6	12.9	0.1	-12.3
Defense	47.5	11.0	8.3	10.7
Religious affairs	32.1	7.4	1.4	6.6
Indonesian national police	29.8	6.9	4.3	7.1
Health	27.7	6.4	14.2	16.2
Transportation	22.1	5.1	8.5	25.9
Finance	17.6	4.1	21.3	14.3
Agriculture	16.7	3.9	6.8	88.2
Energy & mineral resources	15.3	3.5	38.5	91.2

Note: * Total is sum of line ministry/agency allocations.

Source: MoF and World Bank

World Bank projections are for a deficit of 0.9 percent of GDP in 2011

The World Bank 2011 budget deficit projection is 0.9 percent of GDP or IDR 64 trillion (Table 10). As for previous years, the primary reasons for the lower deficit relative to the Government's are higher projected tax revenues (given stronger assumed nominal GDP growth, see the June 2010 *IEQ*) combined with an assumption that disbursement rates remain below 100 percent. However, disbursement rates on core programs are projected to improve from 2010, as some reforms to improve budget execution become effective. Given a higher oil price assumption, the World Bank projects higher energy subsidies and transfers to the regions relative to the budget, as well as higher related revenues.

Table 10: The 2011 budget projects some expansion of the deficit as key spending areas are supported (IDR trillion, unless otherwise indicated)

	2009	2010	2011 (p)	2011 (p)
	Outcome	Outcome	Budget	WB estimates*
A. State revenue and grants	848.8	1,014.0	1,104.9	1,148.8
1. Tax revenue	619.9	744.1	850.3	846.8
a. Domestic tax	601.3	715.2	827.2	804.0
i. Income tax	317.6	356.6	420.5	423.3
- Oil and gas	50.0	58.9	55.6	68.3
- Non oil and gas	267.5	297.7	364.9	355.1
ii. Other domestic taxes	283.6	358.6	406.8	380.7
b. International trade tax	18.7	28.9	23.0	42.7
i. Import duties	18.1	20.0	17.9	22.9
ii. Export duties	0.6	8.9	5.1	19.8
2. Non-tax revenue	227.2	267.5	250.9	302.0
<i>o/w natural resources</i>	139.0	170.1	163.1	191.1
i. Oil and gas	125.8	152.7	149.3	170.9
ii. Non oil and gas	12.8	17.3	13.8	20.1
B. Expenditure	937.4	1,053.5	1,229.6	1,212.6
1. Central government	628.8	708.7	836.6	818.4
- Personnel	127.7	147.7	180.8	171.8
- Material expenditure	80.7	94.6	137.9	124.1
- Capital expenditure	75.9	75.5	135.9	122.3
- Interest payments	93.8	88.3	115.2	113.6
- Subsidies	138.1	214.1	187.6	214.2
- Grants expenditure	0.0	0.1	0.8	0.2
- Social expenditure	73.8	68.4	63.2	60.7
- Other expenditures	38.9	20.0	15.3	11.4
2. Transfers to the regions	308.6	344.7	393.0	394.2
C. Primary balance	5.2	48.9	-9.4	49.9
D. SURPLUS / DEFICIT	(88.6)	(39.5)	(124.7)	(63.8)
Deficit (percent of GDP)	(1.6)	(0.6)	(1.8)	(0.9)
Economic assumptions/outcomes				
Gross domestic product (GDP)	5,604	6,423	7,020	7,475
Economic growth (per cent)	4.6	6.1	6.4	6.4
CPI (per cent)	4.8	5.1	5.3	6.3
Exchange rate (IDR/USD)	10,356	9,074	9,250	8,900
Interest rate of SBI (average %)	7.3	6.4	6.5	7.0
Crude oil price (USD/barrel)	61.6	79.4	80.0	90.0
Oil production ('000 barrels/day)	950	954	970	970

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)

Source: MoF and World Bank projections

After over-financing in 2010, due to the markedly lower deficit, the Government plans to use domestic sources to cover most of its net financing needs in 2011

With the deficit coming in low, gross financing over 2010 was IDR 50 trillion above financing needs (Table 11). Domestic issues accounted for the vast majority of gross debt financing (IDR 143 trillion out of IDR 167 trillion). Net foreign concessional financing was a slight negative and is expected to remain low in 2011.

Bond sales reached around 20 percent of the annual target in the first two months of 2011 and a number of bond buy backs have been conducted. The Government has also indicated plans to launch global issues in the next few months. Although there has been some upward adjustment in yields, as mentioned above, under the baseline scenario demand for Indonesia's sovereign debt is likely to remain strong. In addition the Government's over-financing for 2010 has helped to build up a cash buffer in the event of shocks to financing conditions.

Table 11: Gross financing in 2010 came in well above outturn financing needs
(IDR trillion)

	2010		2011
	Revised budget	Outcome	Budget
Financing needs			
A. Overall deficit	133.7	39.5	124.7
Primary deficit	28.1	-48.9	9.4
Total interest payments	105.7	88.3	115.2
B. Amortizations	141.5	135.6	133.5
Government securities	70.5	76.5	74.0
Official external loans	54.1	50.6	47.8
Subsidiary Loan Agreement	16.8	8.5	11.7
C. Other*	22.5	20.8	16.0
Total gross financing needs (A+B+C)	297.7	195.9	274.2
Financing sources			
E. Official borrowing	70.8	53.2	58.9
F. Commercial bonds	178.0	167.3	200.7
G. Domestic banking	45.5	21.5	12.7
H. Other**	2.4	3.2	0.9
Total gross financing sources (E+F+G+H)	297.7	245.6	274.2

Note: * Other financing needs includes, for example, government investment fund and asset recovery. **Other financing sources includes, for example, domestic bank loans

Source: Debt Management Office

7. Near-term uncertainty around the outlook has risen

Near-term risks have risen in line with commodity price volatility

Risks around the baseline outlook have risen. Most prominently these relate to oil and commodity prices, affecting Indonesia's fiscal balances and trade flows. There is also the risk that further shocks to inflation, either domestic or external in origin, spill over into rising inflation expectations, general prices and wages.

Sustained elevated oil prices through 2011 are a key near-term risk

Higher oil prices through 2011 could place a drag on global growth and also increase the fiscal burden of the current energy subsidies. Table 12 presents a range of outcomes for macroeconomic and fiscal variables for two higher oil prices above the USD 90 per barrel baseline assumption. There is likely a modest positive impact on headline GDP from the higher oil prices, with a weaker external environment partially offsetting some positive impact on domestic production. Nominal GDP is expected to rise as there is a now a larger revenue stream accruing to domestic producers of oil. Consistent with this, the GDP deflator is expected to be around ½ per cent higher under the USD 105 oil scenario, and 1 per cent higher under the USD 120 scenario due to the impact on transportation costs. Under the current fuel subsidy policies, consumer prices on balance are unlikely to change from their baseline forecast as domestic consumers are generally shielded from any rises in international oil prices. In the case of subsidy reform, the impact on consumer prices would depend crucially on the nature of the reform. It is also likely that there would also be some upward pressure on consumer prices from the second round impact of higher transportation costs.

Table 12: Different oil price scenarios for 2011 mostly impact the budget deficit

	Oil price scenarios		
	USD per Barrel		
Projections for 2011:	90	105	120
Real GDP growth (percent)	6.4	6.4	6.5
GDP deflator growth (percent)	9.4	9.9	10.0
Nominal GDP growth (percent)	16.4	16.9	17.4
Energy subsidies (percent of total expenditures)*	9.6	12.2	14.6
Energy revenue (percent of total revenues)	20.8	23.2	25.2
Budget deficit (percent of GDP)*	-0.9	-1.0	-1.3

Note: * Assumes no change in subsidy policy relative to budget. Source: World Bank projections

Generalized commodity price increases would help to reduce the Budget deficit

Given the comovement seen in energy and non-energy prices it is unlikely that a higher oil price scenario would not be accompanied by more general rises in commodity prices. Following the analysis of the June 2010 *IEQ*, an upward shock of 15 and 30 percent to the baseline commodity price assumption would increase both real GDP (by 0.2 percentage points with a 30 percent shock) and nominal GDP. The projection for inflation would rise by 0.4 percentage points under the 30 percent shock scenario. It was also found that generalized higher commodity prices are a net positive for the budget.

Appropriate macro policy responses are crucial mitigating factors to limit the impact of any such shock on the domestic economy

Indonesia's vulnerabilities to capital outflows following adverse shocks to financial market sentiment remain. While reserves have increased over the past year, so has the exposure to potential outflows, for example, in the form of non-resident holdings of government securities, SBIs and domestic equities. Appropriate, timely and coordinated policy responses help to limit the potential amplification of any shocks, such as to inflation or rising oil prices, via the channel of changes in foreign investor sentiment.

Looking to the medium term, addressing infrastructure weaknesses is key to further improving Indonesia's growth trajectory

Beyond the short-term risks, moving growth up to the 7 percent level or more will require investments to address Indonesia's infrastructure weaknesses and to enhance skills and training. On infrastructure, the shift towards capital expenditures in the budget is a positive development and the Land Acquisition Law is also currently with Parliament. Further improvements to the investment climate can also help stimulate further job- and income-creating investments.

The net impact on Government finances is expected to be relatively limited in a scenario of higher oil prices alone, i.e. assuming no change in other commodity prices relative to the baseline. Fuel subsidies are expected to increase to 14.6 per cent of total expenditure under the USD 120 scenario, up from 9.6 per cent in the baseline scenario of USD 90 (Table 12). Transfers to sub-national Governments also rise given the revenue-sharing arrangements for oil and gas revenues (15.5 percent for oil and 30.5 percent for gas). Oil and gas revenues increase to 23.2 per cent of total revenues under the USD 105 scenario and to 25.2 per cent under the USD 120 scenario. However, this is not enough to offset the increase in spending, and the World Bank's projected budget deficit would increase to 1 percent of GDP under the USD 105 scenario and to 1.3 percent under the USD 120 scenario.

B. SOME RECENT DEVELOPMENTS IN INDONESIA'S ECONOMY

1. Recent rises in food prices and their impact on poor and vulnerable households

Recent rises in domestic and international food prices have again focused concern on policy measures to mitigate their adverse impact on poor and vulnerable households

The international prices for most agricultural commodities have risen sharply since mid-2010. Domestic food price inflation has picked up in many countries. Three years after the 2008 food price crisis, food security concerns have re-emerged, prompting governments to consider a suite of tools to dampen the effect of rising food costs, particularly on poor households.

In Indonesia, the domestic price of rice, the most important commodity for poor households, increased rapidly over 2010. This drove up food price inflation, almost to the levels seen in 2005 and 2008, reducing consumers' purchasing power. This section examines these recent price dynamics and then outlines some examples of policies which have been adopted internationally to mitigate their impact on poorer households, including well-targeted safety nets to protect vulnerable consumers and measures to improve the availability and supply of key foodstuffs in the short- and longer-term.

a. Resurgent food inflation in Indonesia was driven by increasing domestic rice prices

Inflation accelerated sharply in late 2010 driven largely by food price increases, especially rice and chili, but has moderated recently

Weather-related disruptions throughout 2010 reduced domestic food production and led to large increases in food prices throughout Indonesia. In particular, grain consumer prices (of which rice comprises 88 percent) were up by 26.9 percent year-on-year at the end of 2010. The rise in prices was caused by an unexpected drop in rice supply in several regions across Indonesia, as prolonged wet weather led to various kinds of pestilences to break out in several main production areas. Continuous rain also disrupted the inter-city and inter-island rice distribution channels. Spice prices were another contributing factor to the rise in food inflation (Figure 16) with much larger shocks experienced for the price of chilies, up around 200 percent year-on-year in 2010.

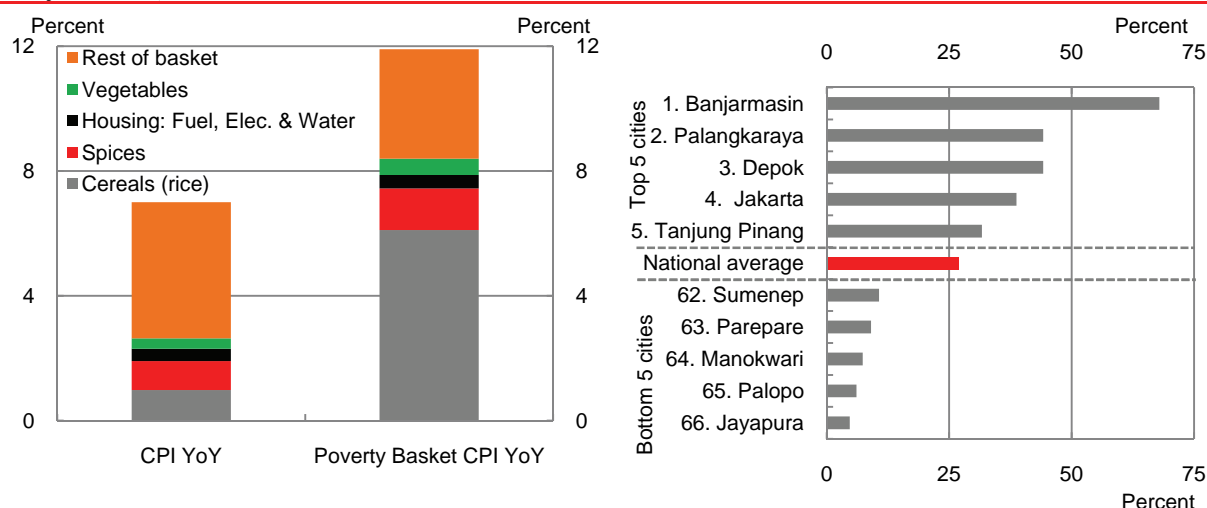
In recent weeks food price inflation has moderated. Domestic wholesale prices (IR64 III quality) peaked in November (at a level 26 percent higher than a year earlier) and have since declined by 8 percent through February, as the harvest season has commenced and rice imports from Bulog were distributed. Grain prices in the CPI also fell on the month in February and the year-on-year increase dropped down to 16 percent.

The increases in the price of rice were not felt equally across Indonesia's cities

The increase in the price of rice was not uniform across cities or by point of sale. For example, in December 2010, grain prices grew by 66 percent year-on-year in Banjarmasin but only by 5 percent in Jayapura. The distribution of prices suggests local factors were influencing prices and remoteness was not the only factor at play. For example, the highest increases were not limited only to remote cities in Indonesia with Depok and Jakarta experiencing the third and fourth largest rice prices increases in 2010 of all the 66 cities covered in the BPS CPI data (Figure 17). Price movements also varied at the point of transaction. For example, wholesale prices remaining relatively stable from around September 2010 while retail prices continued to increase over the same period.

Figure 16: Rice price increases made a major contribution to year-end inflation, particularly for the poor
 (percentage point contribution to December 2010 year-on-year inflation rate)

Figure 17: The rate of increases in grains prices was not uniform across cities
 (percent year-on-year grains inflation in December 2010)



Sources: BPS and World Bank

Notes: 'Grains' refers to the subcomponent in the CPI Cereal, Cassava and related products (of which 88% is rice). Sources: BPS and World Bank

The domestic price of rice remains substantially higher than the international price

The weak integration of Indonesia's rice market with international markets means that international rice prices do not have much influence on domestic prices, and these are mostly determined by domestic supply conditions. For example, as domestic supply shocks hit in 2010, the price that Indonesians pay for their rice rose considerably above the international price (Figure 18). The domestic price was only 4 percent more expensive than the international price in December 2009, but this gap peaked at 77 percent in August 2010 before stepping down gradually to 33 percent in January 2011 as international prices of rice picked up faster than domestic prices. However in February, the fall in the international price of Vietnamese rice, reflecting the depreciation of the currency against the US dollar, was greater than the domestic price decline, leading to a rise in the gap between domestic and international prices to 41 per cent. This positive price differential has not always been the case; in 2008 it was international prices that ended up 80 percent higher than Indonesian domestic prices after increasing three-fold, while domestic prices only rose by 13 percent year-on-year. In 2008 domestic rice supply was strong while in 2010 it was dampened.

Recent rises in the international price of rice have been relatively moderate compared with other food items

Indonesia's food price inflation can be viewed within the context of a global picture of rising food prices.² The World Bank's global food price index in February 2011 matched its 2008 peak. One crucial difference between now and the food crisis of 2008 is the more moderate increase in the global price of rice. The export price for Thai rice increased by only 9 percent between October and February and remains about 70 percent below the peak reached during the 2008 food crisis. Factors which have kept the pace of rice price increases below that of other grains include good harvests in large exporting countries, lower import demand and the release of large stocks onto the market by some of the major exporters. However, the internationally traded market for rice is very thin with estimates that only 7 percent of global production is internationally traded. This means that prices are very sensitive to sudden decisions by countries to import large quantities of rice or to changes in export policies which can instantly alter global balances, as seen during 2008.

² For more details see the World Bank's February 2011 Food Price Watch report http://www.worldbank.org/foodcrisis/food_price_watch_report_feb2011.html.

Food price inflation has risen in many countries but Indonesia's rate is relatively high compared with regional peers

As global prices have risen so domestic food inflation has picked up in many countries, both developing and higher income. Indonesia's neighbors within East Asia are also experiencing rising food costs, particularly in China and Vietnam. Indonesia's food inflation rate is relatively high at 15 percent year-on-year in February 2011 driven largely by the higher increase in rice prices (Figure 19).

Figure 18: The Indonesian price of rice is considerably higher than the international price
(Percentage point gap, IDR per kilogram)

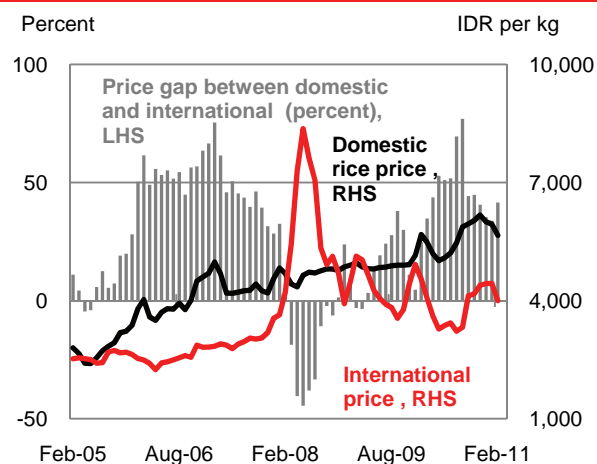
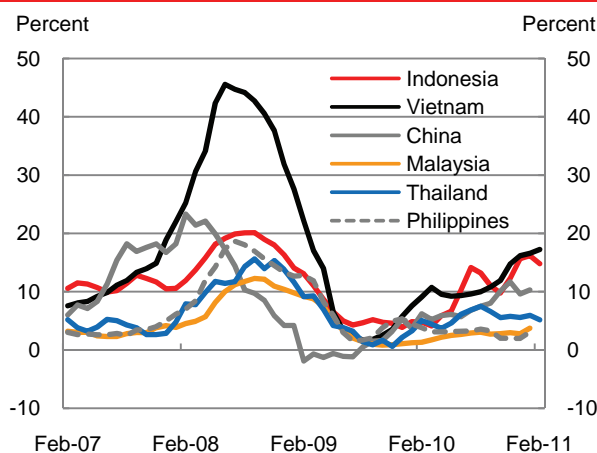


Figure 19: Indonesia's food inflation is amongst the highest in the region
(Percent)



Notes: Domestic prices are low quality (IR 64 III) wholesale prices and international prices are Vietnamese 25% broken countries rice in rupiah
Sources: Jakarta wholesale market, FAO

b. Poor households purchasing power is reduced because of rising food prices

Globally, the recent rise in food prices is estimated to have increased poverty by an additional 44 million households worldwide

At the global level, the impact of and the current spike in international food prices on the poor will be significant. According to the World Bank's February 2011 Food Price Watch the estimated increase in poverty (defined on an internationally comparable basis as \$1.25 expenditure per person per day) will be about 44 million households worldwide, or roughly 0.8 percent of the population in low and middle income countries. This overall figure includes a move into poverty of 68 million people and 24 million net food producers who were able to move out of poverty. However, the impact will also be felt by those vulnerable groups who lie above this poverty line.

The significant impact of rice price inflation on poor households stems from the large share of their monthly expenses going to rice...

In Indonesia, food constitutes more than 50 percent of expenditure for half of the population in Indonesia and rice constitutes around 17 percent of all expenditure for the poorest 20 percent of the population, in contrast with only 3.8 percent for the wealthiest 20 percent. As a result increases in the domestic rice price significantly impact the purchasing power of the poor and near poor, with more adverse effects on those who are net rice consumers. For every one poor household that benefits from higher rice prices (as net rice producers), there are three poor households who are net consumers of rice and are harmed by higher prices. Additionally, there are important nutritional consequences with reduced purchasing power as rice comprises 50 percent of the total calorie intake and 23 percent of the total protein intake of poor households' consumption.

...as a result the rises in domestic rice prices risk reversals in the progress on poverty reduction

The relative impact of rice prices on the expenditures of the poor can be seen in the divergence between headline and poverty basket inflation. Poverty basket inflation peaked at 13 percent in December 2010, 6 percentage points higher than the headline inflation rate, and has since declined to 10.5 percent in February. Sufficiently large enough food price shocks can lead to increases in the poverty rate, even in times of robust growth, such as 2005-06, when poverty went up from 15.7 percent to 17.8 percent, and potentially again in 2011.

c. Policy responses to assist vulnerable and poor households³

The experience of the 2008 food price crisis suggests that successful policy interventions in response to rising food prices be aimed at supporting vulnerable households, creating incentives for producers and being financially sustainable

A range of policy instruments are available to manage the impact of food price increases. The experience of the food price crisis of 2008 can provide valuable insights into what might constitute successful policies to respond to the current price increases. One lesson is to design policies carefully in order to meet the short-term objectives of protecting the most vulnerable households and to maintain and create incentives for the long-term supply of food, including enhancing agricultural productivity. At the same time it is important that the policies be financially sustainable. A second lesson is the importance of timely and accurate information which can inform the formulation and evaluation of effective policies. This involves putting in place a framework for action to allow for the methodical monitoring of prices; assessing their impact on the economy; assessing the available policy options through proper cost-benefit analysis; and then monitoring and evaluating the adopted measures, to be able to review and revise these measures if not successful.

In the face of rising food prices social safety nets can play a key role in forestalling increases in poverty and may also bring wider developmental benefits

By helping to prevent increases in poverty, social protection programs help households maintain access to food, energy, and essential services. Social safety nets can also reduce the impact of economic shocks on health and education.⁴ However, establishing new social safety net programs to deal with an emerging food price crisis may not be feasible due to the technical and administrative challenges involved. Given the need to respond with urgency, scaling up established programs to increase program benefits has proved to be an effective approach in the short-run. For example during the food and fuel price rises of 2008, Brazil, Yemen and Kyrgyz Republic increased existing conditional cash transfer programs, the Chilean government increased the level of the winter heating allowance, Bangladesh scaled up the existing Vulnerable Group Feeding (VGF) program targeted to poor women, and Egypt increased the ration of food it subsidizes, as did some states in India. The scale-ups of existing programs are particularly effective, and cost-efficient, when the existing programs are well-targeted and with a high coverage of the poor. Although food and fuel prices are expected to remain high over the medium-term, as the initial price shock dissipates it may be appropriate to scale-back the level of support, unless the initial safety net was inadequate to begin with.

When the swift scaling up of social protection programs to address the impact of food prices rises is not feasible, other policies may be adopted to improve the availability and affordability of key food items. The first choice for many countries in this respect is to reduce tariffs and other taxes. For example, as food price inflation rose through 2008, some 33 of 80 countries sampled by the World Bank in March 2008 had reduced such taxes in the wake of rising food inflation. This mechanism has been implemented by many countries recently, including Morocco, Nigeria, Turkey, and by the Government of Indonesia in late 2010.

The fiscal costs of a well-targeted safety net for the poorest need not be unduly high, especially compared to the present and future costs of not having them in place

Effective short-term responses to food price shocks do not need to be fiscally burdensome if well-targeted and efficiently implemented. Even such large and generous conditional cash transfer programs as those in Mexico and Brazil are only around 0.5 percent of GDP. For a large share of developing countries, spending on overall safety nets has been on the order of 1 to 2 percent of GDP in recent years. However, the costs of responses will differ according to the scope, generosity, and degree of targeting. For example, in Chile, where the response was a very time-limited increase in targeted transfers, the cost was a mere 0.04 percent of GDP. In Ethiopia, the total additional costs of lifting the value-added tax on food grains, raising the wage on the cash-for-work program, and distributing wheat to the urban poor at a subsidized price in response to the 2008 food crisis were likely to exceed 1 percent of GDP. Additionally, there are savings to be made by adjusting existing fiscal policies which are less cost-effective. For example, the response to domestic food

³ For country examples of policy response to food price shocks see, for example, Paul Dorosh (2008), 'Food Price Stabilisation and Food Security: International Experience', Bulletin of Indonesian Economic Studies, Vol. 44, No. 1, 93–114, World Bank (2008), Rising Food and Fuel Prices: Addressing The Risks To Future Generations, Oct 2008 and World Bank (2010), Boom, Bust and Up Again? Evolution, Drivers and Impact of Commodity Prices: Implications for Indonesia.

⁴ As seen through the usage of the BLT cash transfers program in Indonesia in 2005 and 2008 in response to the rise in domestic fuel prices (see December 2010 IEQ).

price increases in Bangladesh following flooding in 1998 induced a rise in the import and distribution of rice by many small traders which helped to keep costs down and led to a saving of around USD 50-100 million relative to the cost had the government imported the grain itself and delivered to local distribution points (Box 4).

Box 4: The case study of the evolution of Bangladesh's food policy

The Bangladesh food economy is similar to that of Indonesia, each having a large population, a dominant role for rice in grain production and consumption, and multiple rice crops that spread major rice harvests throughout the year and help limit intra-annual price fluctuations. Until the early 1990s the food policy of Bangladesh closely resembled that of India, with government control of international trade and large-scale domestic procurement to help supply a public foodgrain distribution system. Since the early 1990s, however, Bangladesh has liberalized its domestic and international trade, while retaining a more limited public foodgrain distribution system. As a result, private sector imports have played a major role in price stabilization, particularly following major domestic production shortfalls such as occurred after the severe floods in 1998.

Before the rice and wheat import trade was liberalized in the early 1990s, Bangladesh attempted to stabilize food supplies and prices through a combination of food aid, public sector imports and operation of public buffer stocks. Following severe flooding in 1998, however, private sector rice imports, made possible by earlier trade liberalization and investments in infrastructure and market development, effectively stabilized market supplies and prices. In mid-1998, major floods spread across much of Bangladesh and rice prices rose to import parity levels (the export price of rice in the exporting country plus transport and normal marketing costs), inducing huge inflows of rice imported by hundreds of small traders. Private sector rice imports—totaling 2.5 million tonnes from July 1998 through April 1999, according to official estimates—were 6.1 times larger than government rice distribution.

Had the government of Bangladesh imported this grain itself, the average additional cost of the imported rice delivered to local distribution points would have been approximately USD 50–100 million, as a consequence of its weak cost minimization capability relative to private sector operators. And, if the government had subsidized this rice by selling it at the open market sale price used for very limited government sales in urban centers, the total fiscal cost would have been USD 160–210 million.

In 2008, in the face of a 45 percent increase in the price of rice over the course of 1 year, the government of Bangladesh's policy response once again avoided major reductions in purchasing power of poor households and stock management manipulations. The government provided social protection via short-term assistance to vulnerable groups through scaling up of the existing Vulnerable Group Feeding (VGF) targeted to poor women and subsidized open market sales for 3 kilograms (kg) of rice per person for poor consumers in urban areas and small centers. For farmers, the government gave the option of selling to the state at a fixed price of taka 28 (USD 0.5)/kg and a subsidy, in the form of a cash transfer, to poor and marginal farmers, to mitigate higher costs of production—especially fuel for irrigation.

Sources: Paul Dorosh, 'Food Price Stabilisation And Food Security: International Experience', *Bulletin of Indonesian Economic Studies*, Vol. 44, No. 1, 2008: 93–114 and World Bank (2008), *Rising Food And Fuel Prices: Addressing The Risks To Future Generations*.

Measures to address longer-term production and supply issues include well-designed and time-limited subsidies...

The rising costs of fertilizers and energy over recent years have increased the costs of grain production sharply. In such a context, well-designed subsidies aimed at poor and small-scale farmers who could not otherwise purchase agricultural inputs could be introduced for a limited period to boost yields. But such subsidies often involve significant trade-offs with other pro-poor public spending. Malawi's input subsidy program costs approximately three percent of overall GDP—the same as the entire primary education budget. Instead of subsidizing a particular input (such as fertilizer), yields can be increased by lowering post-harvest losses through better use of post-harvest technology and infrastructure.

**...market-based
instruments to help
stabilize prices...**

At the same time, policy makers in other countries have taken measures to encourage the development of market-based instruments that can act as price stabilizers. For example, South Africa has developed a regional futures market for key staples and Malawi has experimented with index-based weather insurance. Mongolia has piloted an Index-based Livestock Insurance Program which provides coverage against catastrophic livestock mortality events in local areas. The public sector can support the development of these instruments by fostering an appropriate regulatory environment, and by providing direct support to overcome market failures at an initial stage.

**...and investments in
agricultural productivity**

Enhancing domestic supply through increasing agricultural yields can be promoted through a range of policy measures. For example, support for agricultural technology and its adoption, market access and diversification, and land administration and management. Investing in irrigation has also been shown to yield high returns in terms of agriculture productivity. According to the World Development Report 2008, estimates of economic returns for investments in effective water systems are on average 15-20 percent, excluding the social gains they entail. This is consistent with research in Indonesia which shows that irrigation has a significant impact in reducing poverty.⁵ Other policy changes by the Government may serve to facilitate private sector investments. For example, the loosening of domestic price controls has contributed to increased investment aimed at increasing cereals productivity in Brazil, Malaysia and Thailand

Investments in basic rural transport and information systems have also been shown to reduce prices and increase opportunities, particularly where farmers are in remote regions. Improvements in ports and road infrastructure, customs facilitation, logistics performance, and efficient grain storage can also play a role in enhancing producer responses as well as benefiting consumers. For many low income countries, transport and logistics costs are a key component of food prices and are generally far higher than OECD country benchmarks of around 9 percent. In Latin America and the Caribbean, for example, they are estimated to be between 18 and 30 percent of product value.

⁵ Hussain, I. and Wijerathna, D. 2004. Irrigation and Income-Poverty Alleviation: A Comparative Analysis of Irrigation Systems in Developing Asia, International Water Management Institute (IWMI), February 2004.

2. Indonesia's fuel subsidies: past experience and lessons from other countries

The recent spike in global oil prices has placed additional focus on the potential rising cost of Indonesia's fuel subsidies and Government plans to improve their targeting

Partly driven by political developments across the Middle East, global oil prices breached USD 100 per barrel in late February 2011. As in previous oil price spikes in 2004-05 and 2008, this development has placed additional focus on the potential rising cost of Indonesia's current system of fuel subsidies and the volatility they introduce to public spending and balances. At the same time, the current Indonesian Administration has signaled its intention to improve the targeting of fuel subsidies, and is currently considering a plan to prohibit private cars from using subsidized gasoline; plans that have attracted considerable reporting and debate in the Indonesian press. To contribute to this public discussion, this section looks back at Indonesia's experience with fuel subsidies over the past five years as well as the policy experiences of other countries which may be relevant for the Indonesian context. The section will first discuss fiscal risks associated with fuel subsidies then discuss their distributional implications, highlighting that most of the benefits go to commercial users and wealthier households, and finally look at potential implications of ongoing subsidy reform plans.

a. Indonesia's fuel subsidies are costly and create risks for public finances

Indonesia has significantly reformed its fuel subsidy system since 2005

Indonesia significantly reformed its fuel subsidy system in 2005 following a sustained rise in global oil prices beginning in 2004. Regulated fuel prices were more than doubled for households and the transportation sector, and subsidies were eliminated for industrial users. Some of the savings from these reforms were used to fund increased spending on education, health and subsidized rice for the poor as well as a temporary unconditional cash transfer (BLT, Bantuan Langsung Tunai) that successfully helped protect over 19 million poor and near-poor households from the inflationary shock caused by the fuel price increases.⁶ Further adjustments to the fuel subsidy system have been made since, including the launch of a kerosene-to-LPG conversion program in 2007 and a temporary increase in fuel prices at the height of a spike in global oil prices in 2008 (which was accompanied by another round of BLT payments).

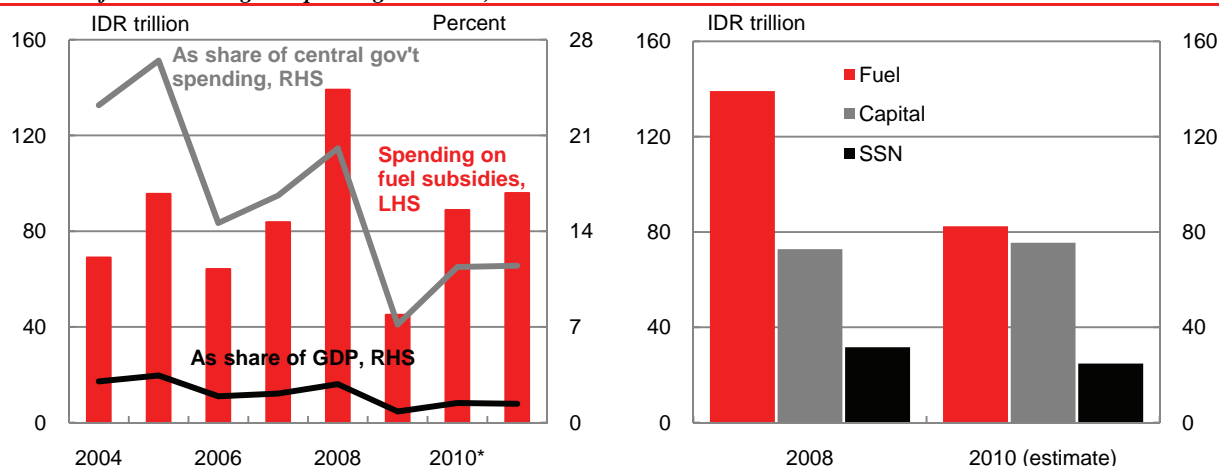
Despite these reform efforts, Indonesia's fuel subsidies remain costly and consume valuable fiscal resources

While these reforms helped reduce the burden of fuel subsidies on the budget and economy in the years that followed, they remain costly – especially during periods of heightened global oil prices (Figure 20). At the height of global oil prices in 2008, Indonesia's annual spending on fuel subsidies reached IDR 139 trillion (US\$14 billion), equivalent to 2.8 percent of GDP, and consumed 20 percent of total central government expenditure (Figure 21). While the collapse in oil prices following the onset of the global crisis reduced the subsidy bill in 2009 to IDR 45 trillion or just 7 percent of total central government spending, it subsequently rebounded in 2010 along with the global recovery and growing domestic fuel consumption. The 2011 budget – which assumes an oil price of USD 80 per barrel and further fuel subsidy reform – allocates IDR 96 trillion or 11 percent of total central government expenditure to fuel subsidies. More importantly than the direct cost, which is largely offset by increased revenues from Indonesia's own oil production, fuel subsidies have a high opportunity cost, consuming valuable fiscal resources which could instead be allocated to critical development priorities such as infrastructure or social protection. Spending on fuel subsidies was double capital investment spending in 2008 and more than 4 times greater than spending on targeted social safety net (SSN) programs.⁷ In 2010, spending on fuel subsidies again exceeded spending on capital investment and was more than 3 times greater than SSN spending.

⁶ An assessment of the performance of BLT was discussed in the December 2010 IEQ.

⁷ Targeted SSN programs consist of: Subsidized Rice for the Poor (Raskin, Beras Miskin), Health Insurance for the Poor (Jamkesmas, Program Jaminan Kesejahteraan Masyarakat), Unconditional Cash Transfer (BLT, Bantuan Langsung Tunai), Hopeful Family Conditional Cash Transfer (PKH, Program Keluarga Harapan), Scholarships for the Poor (Beasiswa untuk Siswa Miskin), and smaller social welfare programs for vulnerable groups implemented by the Ministry of Social Affairs.

Figure 20: While trending down, spending on fuel subsidies continues to consume a large share of public spending... (Central government spending on fuel subsidies, IDR trillion investment and targeted social safety net (SSN) programs, and as % of total central gov't spending and GDP)

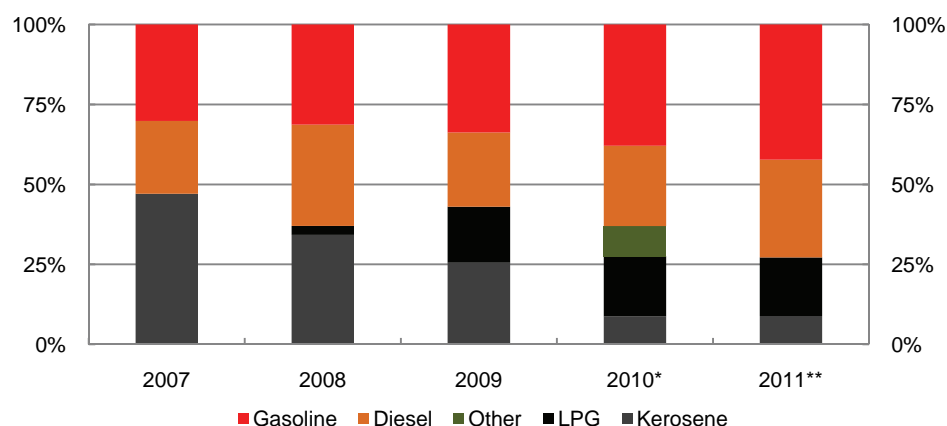


Note: 2010 data are preliminary estimates and 2011 data are APBN budget. Source: Ministry of Finance and World Bank staff calculations

Partly reflecting growing private ownership of vehicles, the gasoline or “premium” subsidy has recently replaced kerosene as the costliest fuel subsidy

Prior to the implementation of the kerosene-to-LPG conversion program, kerosene was the most heavily subsidized and costliest of Indonesia’s fuel subsidies, accounting for almost half of total spending on fuel subsidies in 2007 (Figure 22). More recently, however, gasoline or “premium” has become the costliest of the subsidies, driven in part by rapidly growing private ownership of vehicles.⁸ The gasoline subsidy accounts for 42 percent of total budgeted spending on fuel subsidies in 2011, up from 30 percent of spending in 2007. The relative burden of the diesel subsidy has also increased, rising from 23 percent to 31 percent over the same period.

Figure 22: The gasoline subsidy has recently replaced kerosene as the costliest fuel subsidy (Central government spending on fuel subsidies by type of fuel, share of total spending, %)



Note: 2010 data are preliminary estimates and 2011 data are APBN budget. Source: Ministry of Finance and World Bank staff calculations

⁸ Indonesia witnessed record sales of motorcycles and cars in 2010 (7.4 million and 760,000 respectively) – driven by robust economic growth, rising per capita incomes and access to cheap fuel – taking the stock of motorcycles and cars on the road to an estimated 60 and 14 million respectively.

In addition, increased oil price volatility since 2005 has made spending on subsidies difficult to predict

Increased volatility in oil prices, especially during 2004-05 and 2008, has made spending on fuel subsidies difficult to predict, resulting in final realized spending exceeding the original budget in 6 out of the last 7 years (Figure 23). In 2008, fuel subsidies were three times more than originally budgeted (IDR 139 trillion versus IDR 46 trillion). In 2010, fuel subsidies again exceeded the original budget, reflecting a recovery in global oil prices and faster-than-expected growth in domestic fuel consumption. If global oil prices remain around their recent high levels and no changes are made to the fuel subsidy system, then spending on fuel subsidies would again exceed the budgeted amount in 2011 (see below).

Figure 23: Final realized spending on fuel subsidies exceeded the original planned budget in 6 out of the last 7 years

(Original planned APBN and realized central government spending on fuel subsidies, share of GDP)

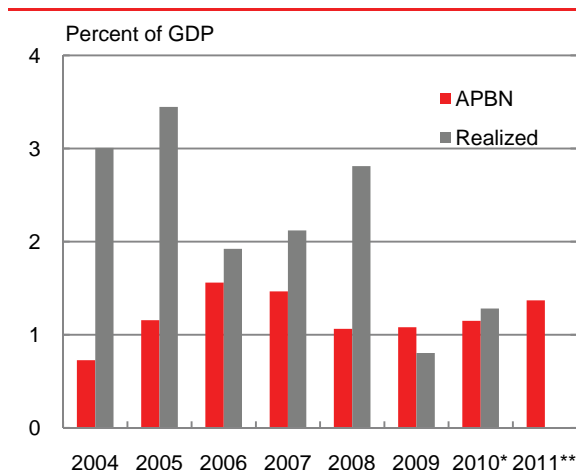
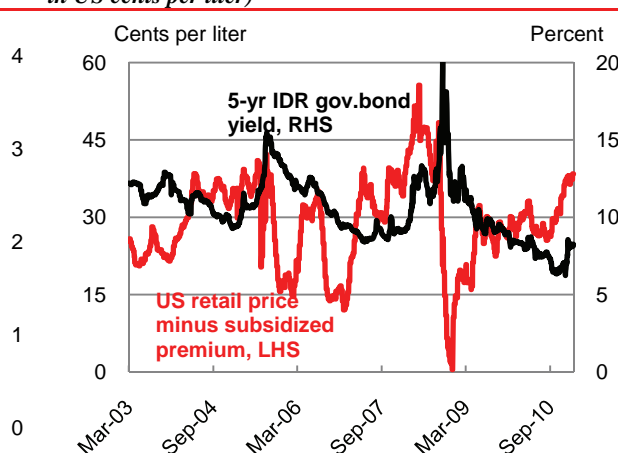


Figure 24: Yields on Indonesian government bonds have risen when the gap between global oil prices and Indonesian retail prices has widened

(Indonesian 5-year rupiah bond yields, in %, and US-Indonesia petrol price differential, in US cents per liter)



Note: 2010 data are preliminary estimates and 2011 data are APBN budget. Source: Ministry of Finance, BPS and World Bank staff calculations

This unpredictability creates uncertainty about the government's financing needs and the outlook for inflation, raising the cost of government borrowing

Uncertainty about the ultimate size of fuel subsidies created risks for public finances in the past. It led to uncertainty about the Government's ultimate financing needs and bond issuance plans for the year as well as over the outlook for inflation, raising the cost of borrowing. The cost of the Indonesian Government's debt is correlated to the gap between regulated and market prices for fuel (Figure 24). Debt markets charge a premium when subsidies are expanding. Government bond yields that move in tandem with oil prices are not unique to Indonesia. But the movements in Indonesia's yields appear to be particularly pronounced, and to take longer than average to return to normal levels after an oil price rally. Furthermore, Indonesia's bond deals are also highly sensitive to how the Indonesian Government manages domestic regulated fuel prices. As the gap between Indonesian fuel prices and international fuel prices widens, speculation over whether the Government will raise fuel prices – which temporarily increases inflation – can contribute to a rise in Indonesia's bond yields markedly. For example, in 2005 and 2008, the 5-year bond yield rose by over 5 percentage points to almost 16 percent in a matter of months.

b. Fuel subsidies are also highly regressive and distortionary

Estimates based on household survey data indicate that commercial users and wealthier households consume the vast majority of subsidized gasoline, whereas most poor and near-poor households do not consume any gasoline

In addition to the fiscal burden and risks of the fuel subsidy system, there is also a concern that the subsidies are not meeting the objective of assisting the poorer segments of the population who most need such support. Estimates based on data from Indonesia's National Household Socioeconomic Survey (SUSENAS, Survei Sosial Ekonomi Nasional) indicate that households or private users may consume as little as one-third of all subsidized fuel, with the residual potentially attributable to commercial users such as transport operators, businesses and other users.⁹ With respect to individual fuels, estimates indicate that households consumed almost half of subsidized gasoline in 2008, implying that commercial and other users consumed the remaining half (Figure 25). A breakdown of the household component of gasoline consumption by socio-economic group indicates that the top half of households by consumption accounted for 84 percent, with the highest consumption decile alone accounting for almost 40 percent. In contrast, the poor and near-poor (defined as the bottom 5 deciles) accounted for just 16 percent, with the poorest decile accounting for less than 1 percent. Moreover, a detailed examination of reported fuel consumption in the household survey indicates that around two-thirds of poor and near-poor households do not consume any gasoline whatsoever, although the likelihood of consuming gasoline and the actual quantity consumed rises with wealth status (Figure 26). With respect to diesel, very few households report any consumption; therefore commercial and other users are estimated to account for virtually all (98 percent) consumption of subsidized diesel.

Figure 25: Commercial users and wealthier households consume the bulk of subsidized gasoline...

(Share of subsidized gasoline consumption attributed to commercial users and private households in aggregate and by average monthly consumption of those that do, by per capita consumption decile, 2008)

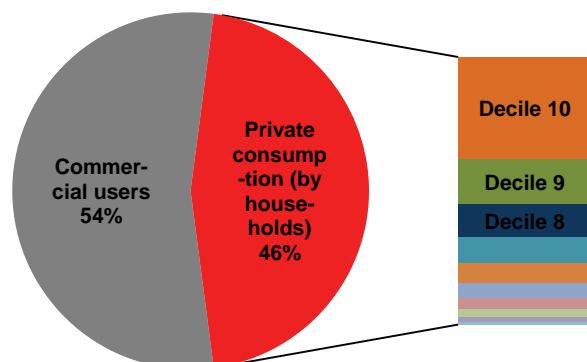
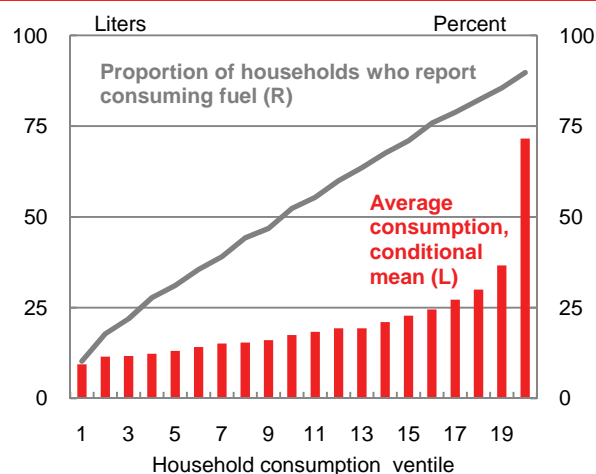


Figure 26: ...whereas most poor and near-poor households do not consume gasoline

(Share of households who report consuming gasoline and average monthly consumption of those that do, by per capita consumption ventiles, 2008)



Source: February 2009 SUSENAS, APBN Statement and World Bank staff calculations

Financial Note: Average consumption is the conditional mean of households who consume gasoline; i.e. households reporting zero gasoline consumption are excluded from this calculation.

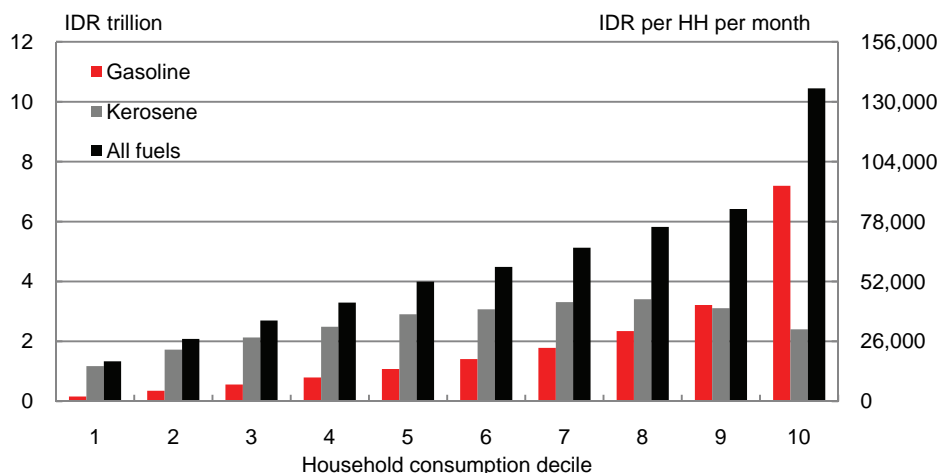
Source: February 2009 SUSENAS and World Bank staff calculations

⁹ Aggregate household consumption of each fuel is estimated by taking the consumption reported by nationally representative households in the SUSENAS survey and scaling up to the national level, with the residual of total consumption (as reported in budget documents) attributed to other users. However, the SUSENAS survey is believed to under represent rich households – who consume higher quantities of fuel – which may lead to underestimation of aggregate household consumption and overestimation of the consumption of other users.

Thus, fuel subsidies are highly regressive, primarily benefiting commercial users and wealthier households rather than the poor or near-poor

Assuming that all consumers pay the same price for fuel, then the pattern of fuel consumption directly determines the distribution of fuel subsidy benefits. Thus, commercial users may have received up to two-thirds of benefits and wealthier households most of the remainder. To put it in terms of a household's budget, fuel subsidies are estimated to have transferred approximately IDR 135,000 per month to the richest households in 2008 and around IDR 23,000 per month to the poorest households (Figure 27). The gasoline subsidy is the most regressive, i.e. benefits the rich disproportionately more than the poorest households, as expected given limited motorcycle and virtually no car ownership amongst poor and near-poor households.

Figure 27: Fuel subsidies, especially for gasoline, mostly go to wealthier households
(Fuel subsidy received by households in each per capita consumption decile by fuel type, IDR in annual aggregate and per household per month)



Source: February 2009 SUSENAS, APBN Financial Statement and World Bank staff calculations

Finally, in addition to the direct fiscal cost, fuel subsidies are also distortionary and create negative externalities with large economic costs

In addition to the direct fiscal outlays, by artificially lowering the price of fuel in the economy subsidies distort consumption and investment decisions. Most visibly and immediately, they encourage higher fuel usage and wastage which creates negative externalities with large economic costs such as: more traffic congestion, pollution and health problems. The subsidies also encourage inefficient investment decisions such as: bigger and less fuel efficient cars, more spread out cities, less efficient housing, and less investment in public transport.

c. Current reform plans and lessons from other countries

Looking ahead, the “status quo” would lead to additional spending on fuel subsidies, especially if oil prices remain around their recent high levels or rise further

Looking ahead, the “status quo” – that is, the maintenance of existing subsidy policies and regulated fuel prices – would lead to additional spending on fuel subsidies in the years ahead. To illustrate the potential size of these outlays, a baseline or “business-as-usual” scenario¹⁰ was developed based on key economic assumptions from the Government’s Medium Term Development Plan (RPJMN) 2010-14. Under this scenario, it is projected that annual spending on fuel subsidies could rise from a budgeted IDR 96 trillion in 2011 to IDR 104 trillion and then to IDR 192 trillion by 2014, totaling around IDR 560 trillion (USD 58 billion) between 2011-2014 (Table 13). The increase in spending is primarily driven by continued growth in the consumption of gasoline and, to a lesser extent, diesel in line with the strong and accelerating economic growth that is projected in the RPJMN over this period. Critically, this scenario assumes a relatively stable and subdued global oil price trajectory, with oil prices averaging just USD 80 per barrel between 2011-14, lower than oil prices of just over USD 100 per barrel in early March 2011. If prices instead

¹⁰ This scenario factors in the full implementation of the kerosene-to-LPG conversion program, but assumes that all other subsidy policies remain unchanged. Thus, retail gasoline and diesel prices remain fixed at their early 2011 levels of IDR 4,500 per liter, no reform plans are implemented, and fuel consumption volumes are not capped.

remain around their recent high levels or rise further to around USD 120 per barrel, then the corresponding cost of fuel subsidies over the next four years would reach IDR 831 trillion or IDR1,116 trillion respectively. Such large outlays on fuel subsidies could undermine the Government's efforts to finance investments in key development priorities outlined in the RPJMN, such as improving infrastructure and expanding health insurance and social protection, and could again make spending on subsidies unpredictable and unsustainable, creating renewed risks for public finances.

Table 13: The status quo would lead to additional spending on fuel subsidies, especially if oil prices remain around their recent high levels or rise further

(Projected spending on fuel subsidies from 2011-2014, IDR trillion)

	2010 Estimate	2011 Proj.	2012 Proj.	2013 Proj.	2014 Proj.	Sum 2011-14
Baseline scenario (RPJM assumptions, avg oil price of US\$80/barrel)	82	104	115	149	192	560
Flat oil price assumption of US\$100/barrel from 2011	--	157	193	223	258	831
Flat oil price assumption of US\$120/barrel from 2011	--	211	258	299	347	1116

	2010 Estimate	2011 APBN	2012 RPJMN	2013 RPJMN	2014 RPJMN	Average 2011-14
Key assumptions from 2011 APBN & RPJMN						
GDP growth (%)	6.1	6.4	6.8	7.3	7.7	7.1
Exchange rate (IDR/USD)	9078	9250	9750	9850	9850	9675
Indonesian crude oil price (USD/barrel)	79	80	75	80	85	80

Source: 2011 APBN, RPJMN 2010-14 and World Bank staff projections

Citing the large cost and poor targeting, the Government has signaled its intention to improve the targeting of fuel subsidies by 2014, and is currently considering a plan to prohibit private cars from using subsidized gasoline

Citing large fiscal and opportunity costs as well as poor targeting, the current Indonesian Administration signaled its intention to improve the targeting of Indonesia's various subsidies shortly after taking office in late 2009. Throughout 2010 and into 2011 there has been considerable reporting and debate in the Indonesian press about potential reform options being considered by the Government, especially with regards to fuel subsidies.¹¹ Ideas floated at various times include plans to prohibiting private cars manufactured after 2005 from using subsidized fuel, prohibiting motorcycles from using subsidized fuel, and introducing a fuel smart card to restrict the sale of subsidized gas to public transport providers and motorcycles. Currently, the Government is considering a plan to prohibit the use of subsidized gasoline for privately owned cars. Initially scheduled to be rolled out starting in the Greater Jakarta area on 1 January 2011 (and later to the rest of Java and Bali, and in later years to the rest of the country), implementation was subsequently postponed pending further study of the plan's feasibility. Given the small weight of private cars in total gasoline consumption (the majority of consumption is attributed to motorbikes and commercial transport which would still be allowed to buy subsidized fuel), it is estimated that this policy would have a limited impact on the subsidy bill. Moreover, given transportation would continue to use subsidized fuel and the small weight of fuel in the consumption bundle of most Indonesians, the impact of the planned reform on the national headline CPI and poverty rate would also be limited.

¹¹ See for example: The Jakarta Post. "Subsidy cut must for healthy budget: SBY". 8 December 2009; The Jakarta Globe. "Indonesia to End Energy Subsidies 'by 2014'". March 23, 2010; Platts Commodity News. "Indonesia to limit sale of subsidized fuel to private cars by Sep" July 13, 2010; The Jakarta Globe. "Subsidized Fuel Limits to be in Place by 2014: Govt". 29 January 2010.

However, international experience indicates that it is difficult to target fuel subsidies well and only a small number of countries operate such policies with limited success

To contribute to the public discussion taking place in Indonesia about better targeting fuel subsidies, it is useful to examine the experiences of other countries. A recent survey of fuel policies in 49 developing countries found that only 13 out of 38 countries which subsidize fuel attempted to target the subsidies.¹² This is because, unlike electricity or piped natural gas, targeting subsidies for liquid fuels is difficult because inter-fuel substitutability and ease of transport and distribution make it virtually impossible to stop diversion and black market sales. The most common methods used to indirectly targeting subsidies towards poorer households include providing larger subsidies, through differential pricing, or only subsidizing: (1) “social fuels” such as kerosene and, to a lesser extent diesel, which are used more intensively by the poor; and (2) industries that have a relatively larger impact on the poor, such as transport and agriculture. However, such differential pricing strategies have not proven to be effective over the long term when tried because they almost always led to diversion away from the intended beneficiaries, resulting in shortages and second round increases in the subsidy bill. Such indirect targeting policies may nonetheless be appropriate short-term transition mechanisms. More sophisticated direct targeting or rationing of subsidized fuel using vouchers or smart cards has also been tried, although only in a handful of countries with limited success. Malaysia, for example, provides extra subsidies for diesel sold to public transport and other selected vehicles using a smart-card system launched in 2006. Despite this sophisticated system and routine checks, however, Malaysia has been unable to eliminate diversion to industrial users and has twice announced then cancelled plans to expand the scheme nationwide citing administrative challenges. Only Iran has deployed smart cards for gasoline on an economy-wide scale starting in 2007. However, after seeming initial success, the system subsequently experienced sustainability and administrative problems, including large black market sales, and was ultimately abandoned in late 2010.

Some countries, Iran being the most recent example, have instead opted to gradually reduce fuel subsidies while compensating the poor through targeted social spending

Some countries around the world have instead opted to reduce or eliminate fuel and other subsidies by gradually closing the gap between regulated and market prices, with some using a portion of the budget savings to increase social spending and/or compensate the poor and vulnerable. In 2001, for example, Brazil reduced gas subsidies and funded a cash transfer program to compensate the poor. This program was later rolled into the flagship “Bolsa Familia” conditional cash transfer program which contributed significantly to impressive reductions in inequality and extreme poverty in Brazil. Indonesia itself, along with China and Chile, successfully utilized this approach during the 2005 global fuel price shock and Indonesia again utilized it in 2008. Iran is the most recent high profile example of this approach. In the face of rising fiscal deficits, it began phasing-out most of its subsidies on fuel and other commodities in late 2010. A significant portion of the resources saved under the reform program (about 70-80 percent) are being transferred directly into the bank accounts of low-income families, and businesses as cash payments, helping to cushion the impacts of the expected price increases resulting from the policy.

While the recent spike in global oil prices raises both the cost of maintaining the status quo and the sensitivity of reform, past experience demonstrates that well designed and communicated change is possible

The recent spike in global oil prices is a reminder of the potentially high cost and fiscal risks of maintaining Indonesia's existing fuel subsidy system. Moreover, even if these costs and risks can be withstood, there would still be a lost opportunity to use Indonesia's fiscal resources – which rise during periods of heightened global oil prices – to help finance the country's ambitious development and poverty alleviation goals. While subsidy reform is a sensitive policy issue, the experience of other countries and Indonesia's own past experience demonstrates that ambitious change is possible even during times of crisis. Where it has been successful, subsidy reform has often been accompanied by: (1) a compensation package to assist the poorest and most vulnerable; (2) increased spending on priorities which attract broad public support, such as education, health, public transport and infrastructure; and (3) a public information campaign to raise public awareness of the costs and implications of the current system and the benefits of reform as well as to alleviate public and investor concerns about the proposed changes. For example, while a major concern with fuel subsidy reform is the impact of higher fuel prices on inflation, it is important to communicate that Indonesia's past experience suggests that such impacts are likely to be largely one-off rather than permanent.

¹² Kojima, Masami. 2009. Government Responses to Oil Price Volatility. Extractive Industries for Development Series #10. Washington, DC: World Bank
http://siteresources.worldbank.org/INTOGMC/Resources/10-govt_response-hyperlinked.pdf

C. INDONESIA 2014 AND BEYOND: A SELECTIVE LOOK

1. Indonesia's changing patterns of consumption growth from 1996 to 2010

1996 to 2010 has seen periods of political and economic crisis, recovery, and economic expansion

Since 1996 Indonesia has gone through a turbulent period of political and economic crisis and recovery, followed by sweeping political changes and strong economic expansion. This section reviews how these developments have translated into consumption growth across households and how these patterns have varied across sub-periods. It then considers their impact on the level of inequality and the importance of promoting equality of opportunities as Indonesia transitions into a middle-income country.

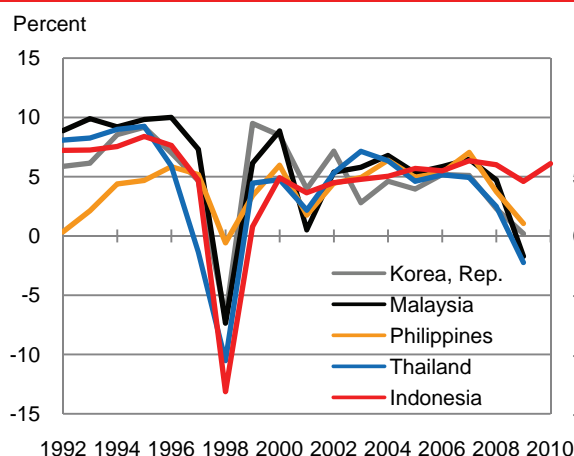
a. Indonesia was the most affected country during the 1997-98 crisis but after a slow recovery has experienced strong growth

Indonesia's economy saw the greatest decline in the region during the Asian Financial Crisis

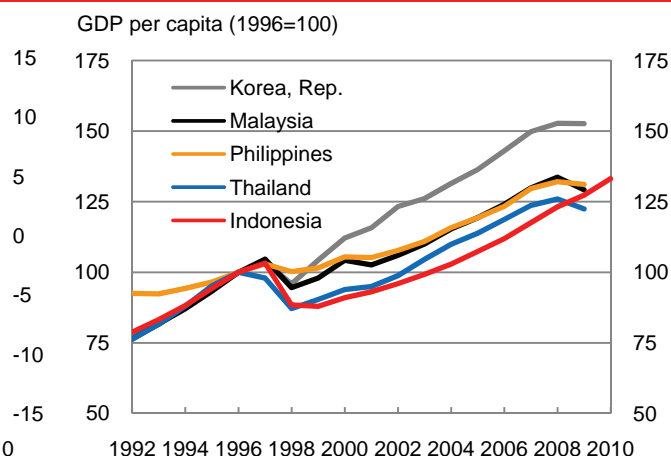
When the Thai Baht was unable to maintain its peg in mid-1997, it precipitated a financial and economic shock in many of regional economies. The Rupiah was also forced to float and fell from IDR 2450 per USD in July 1997 to IDR 14,900 in June 1998 and remained weak, averaging IDR 8,500 in 2000. The sudden and massive devaluation of the Rupiah led to bankruptcy for many firms who had borrowed in foreign currency. Indonesia's GDP declined by over 13 percent in 1998, the largest fall in the region (Figure 28).

Figure 28: The economic impact of the Asian Financial Crisis on Indonesia was the most severe and longest in duration in the region

a) GDP growth rates (percent per annum)



b) Real GDP per capita (local currency) (real GDP per capita, 1996=100)



Sources: World Development Indicators, BPS

The subsequent social and political upheaval precipitated sweeping change

As the economy went into crisis, poverty rose, increasing from 17.7 percent in 1996 to 24.2 percent in 1998, an increase of 15 million people. Many of the new poor were urban workers who returned to the countryside during the Crisis as they lost their jobs in the cities. National poverty remained high over the period, and would not fall below 1996 rates again until 2003, and not in rural areas until 2008. As living standards fell precipitously, protests and riots increased against the Soeharto regime which had ruled for nearly 30 years, and the long-time president was forced to step down in May 1998. As the country transitioned to a democratic framework for the first time since independence, further changes lay ahead, with a decentralization of substantial budgeting and decision-making authority to its then 400 or so districts in 2000-01.

Recovery was slow over the early 2000s, but strong economic growth resumed over the rest of the decade

Growth of around 5 percent or more returned to the economy in 2000, although it would be another 3 to 4 years before per capita GDP recovered to its pre-Crisis levels. However, strong economic growth was maintained in the subsequent decade, and on the eve of the global economic crisis in the fourth quarter of 2008, real per capita GDP was around 20 percent higher than its pre-crisis 1997 level. Small but nearly continuous gains in poverty reduction were made over the same period, falling to new lows.

The economy was resilient during the recent global depression and has rebounded strongly

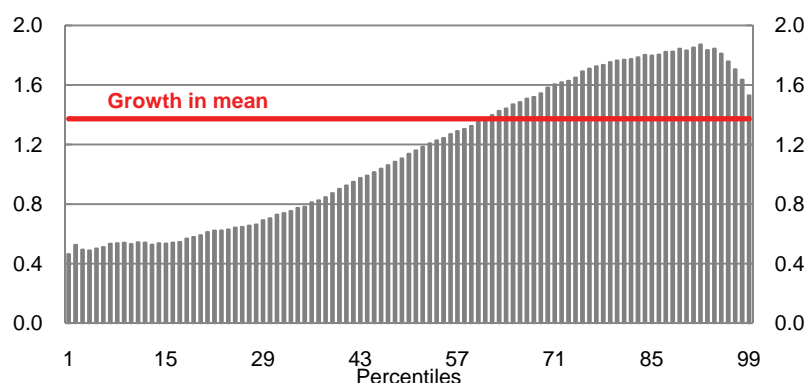
The performance of Indonesia's economy remained resilient through the recent global economic crisis. Positive quarterly growth was sustained and Indonesia was one of the few economies in the region not to suffer a contraction in 2009, growing by 4.6 percent. By 2010 strong growth had resumed, reaching 6.1 percent. Poverty continued to fall, from 15.4 percent in 2008 before the new crisis to 13.3 percent by the first quarter of 2010.

b. Although outcomes have not been the same for all households with richer households experiencing greater growth in consumption from 1996 to 2010

Growth in consumption has been higher for richer households than poorer ones

Per capita consumption over the period 1996 to 2010 grew by 1.4 percent on average, but with considerable variation across percentiles. The poorest percentile of households experienced the lowest growth over the period, while the highest growth was experienced by those in the 92nd percentile. Growth rates for the entire bottom 60 percent of the distribution were lower than the national average (Figure 29). The overall growth incidence pattern between 1996 and 2010 suggests growth was not pro-poor when considered over the duration of the period (see Box 5 for an introduction to growth incidence curves). However, this overall view hides significant variation in the patterns within this period.

Figure 29: Richer households have seen greater growth in consumption from 1996 to 2010
(Annual real growth in per capita consumption, percent)



Sources: World Bank calculations and BPS

Box 5: A brief introduction to growth incidence curves

Growth incidence curves provide an analysis of the annualized growth rate of household per capita consumption by percentile over given periods. They are useful for providing a context within which to evaluate poverty reduction performance. In reflecting the changing consumption patterns of the poorest to the richest, they indicate the extent to which growth is pro-poor.

Growth incidence curves are constructed by simply calculating the growth in real per capita household consumption for each percentile of the consumption distribution over a particular period, and plotting these growth rates by percentile. In the analysis presented here, the current per capita consumption expenditure was adjusted to its real value using the urban poverty line of the province of Jakarta in 2007 as the base year. Technically, to obtain the real per capita consumption expenditure in other provinces, the current or nominal value of the per capita consumption expenditure for a province in any period was multiplied by the poverty line of the province of Jakarta in 2007 and divided by the poverty line of that province for the given period. (Indonesia uses 65 poverty lines, an urban line for Jakarta, and an urban and rural line for each of the other 32 provinces.)

Source: World Bank staff)

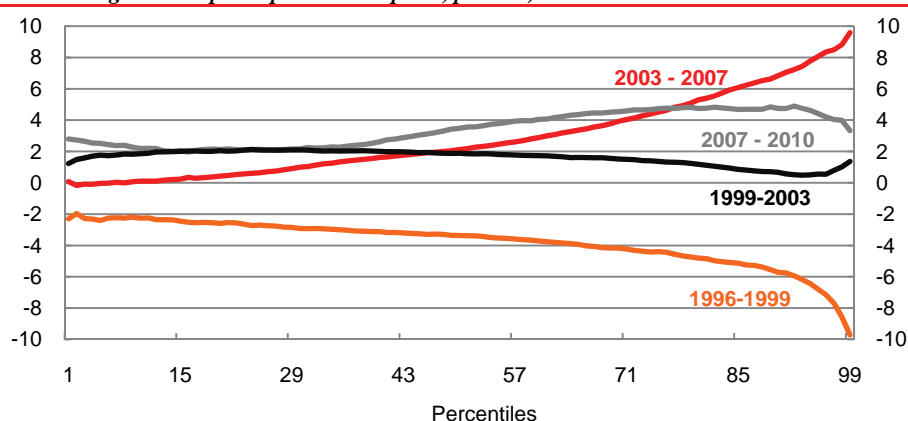
c. However, this overall trend masks considerable differences across sub-periods

Richer households experienced higher volatility in consumption over 1996 to 2010

While all households saw reduced real consumption over the Asian Financial Crisis sub-period of 1996-99, non-poor Indonesians were more affected, particularly those in the richest ten percent of households, who saw declines of 5 to 10 percent. Moreover, the top decile saw the weakest growth during the moderate recovery sub-period of 1999-2003, although otherwise it was broad-based with a growth rate of around 2 percent for all other percentiles. However, 2003-07 was a sub-period which saw significantly unequal growth, with the bottom 50 percent seeing 0 to 2 percent growth, while the top 20 percent experienced 5 to 10 percent, a pattern almost reversing the curve of the 1996-99 crisis sub-period. Finally, growth in the 2007-10 sub-period was more balanced, with

consumption for all percentiles growing at least 2 percent, although remaining higher for the top half of the distribution. Thus the overall picture over the period 1996-2010 was one of high volatility, with richer households being more affected by the serious downturn of the Asian Financial Crisis and slower to recover, but enjoying much more of the growth of the strong economic boom since 2003 (Figure 30). The following sub-section examines these trends in more detail.

Figure 30: Growth in consumption has varied for different parts of the distribution over time
(annual real growth in per capita consumption, percent)



Source: World Bank calculations and BPS

All households saw consumption fall over the Crisis, but significantly more so for the richest households

Encompassing the Asian Financial Crisis, the period of 1996 to 1999 all percentiles experienced contractions in per capita consumption, averaging 4.9 percent per year. The annual decline in consumption for the poorest 30 percent was between 2.2 percent and 2.5 percent, the smallest of any part of the distribution. Those households in the 82nd percentile and above saw the greatest contractions, ranging from -4.9 to -9.7 percent.

Recovery was slow for all households over 1999 to 2003, again with the rich performing worst

The period from 1999 to 2003 represents a time of continued moderate recovery, with the average real consumption growth for all percentiles being about 1.5 percent. Within the distribution, as with the crisis period, the poorest 30 percent of households fared best, this time experiencing average growth in consumption of 1.9 percent, with the 24th percentile having the highest overall rate of 2.1 percent. Meanwhile, the top quintile again had the lowest growth rate, albeit positive, with the 93rd percentile having the lowest overall rate of 0.5 percent. Taken together, this sub-period and the one of the crisis indicate that the crisis affected the poor the least, while the recovery, although broad-based, was pro-poor.

However the strong expansion of 2003-2007 was enjoyed primarily by the top half of the distribution, in a mirror reversal of the growth incidence during the Crisis

The period from 2003 to 2007 saw the highest average growth in per capita consumption of any sub-period between 1996 and 2010, at 4.3 percent. However, unlike the previous sub-periods, the lower part of the distribution experienced very little of this growth, with consumption growth rates between -0.02 percent and 0.3 percent for poorest 30 percent of households. Conversely, households in the 74th percentile and above had rates which were higher than average for this period, reaching nearly 10 percent for the richest percentiles. In fact, the growth incidence curve for this period is almost a mirror reversal of that for 1996-99, suggesting that after a slow recovery from 1999 to 2003, the losses to richer households during the crisis were finally reversed..

Consumption growth from 2007-2010 was more balanced but again favoring the top half of the distribution

The growth incidence over 2007 to 2010 most closely reflects the overall pattern of growth from 1996 and 2010. The average growth rate was 3.9 percent. Growth rates for all percentiles are positive, but growth for the poorest 30 percent was below average, ranging from 2.2 percent to 2.5 percent, while that of the 57th percentile to the 98th was higher than average (the 99th percentile fell below average at 3.3 percent).

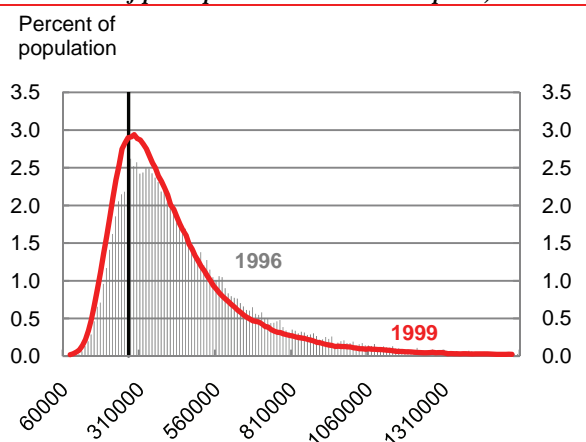
d. ...leading to changes in the consumption distribution...

Changes in the consumption distribution reflect the variation in growth incidence curves over time and between percentiles

The story of changes in the consumption distribution from 1996 to 2010 told so far can be nicely seen in Figure 31 to Figure 34, with the distribution moving leftwards over the crisis period as richer households see significant declines in consumption, followed by recovery for all as the distribution shifts back to the right, but with greater increases for the lower and middle parts of the distribution. The unequal growth of 2003 to 2007 is evident as the poorest part of the distribution remains relatively static while the mode and right parts flatten and shift rightwards. Finally, the somewhat more balanced growth of 2007 to 2010 is seen as the distribution both extends rightwards and flattens, similar to the overall pattern of growth for this entire period.

Figure 31: The distribution shifts left during the Asian Crisis... **Figure 32: ...and back rightwards during the 1993 to 2003 recovery**

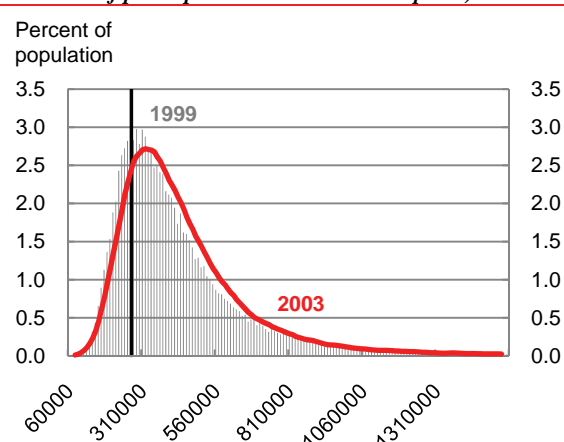
(Distribution of per capita household consumption)



Per capita consumption expenditure, constant Rupiah in 2007
Jakarta urban poverty line

Sources: World Bank calculations and BPS

(Distribution of per capita household consumption)

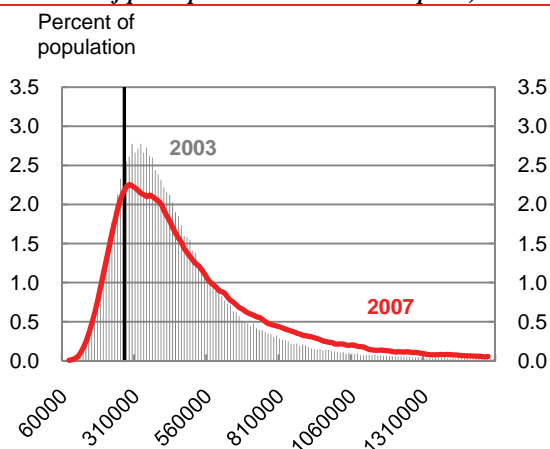


Per capita consumption expenditure, constant Rupiah in 2007
Jakarta urban poverty line

Sources: World Bank calculations and BPS

Figure 33: The middle of the distribution shifts rightwards over 2003 to 2010 while the poorest remain unchanged

(Distribution of per capita household consumption)

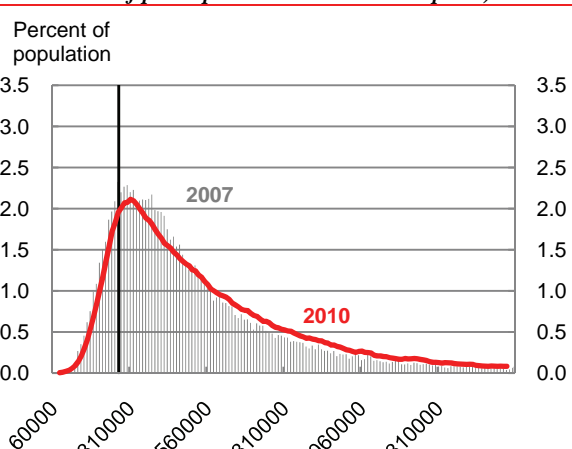


Per capita consumption expenditure, constant Rupiah in 2007
Jakarta urban poverty line

Sources: World Bank calculations and BPS

Figure 34: The entire distribution shifts rightwards during more balanced growth from 2003 to 2010

(Distribution of per capita household consumption)



Per capita consumption expenditure, constant Rupiah in 2007
Jakarta urban poverty line

Sources: World Bank calculations and BPS

e. ...which has seen inequality first fall and then rise again over the period

Inequality fell over the period of crisis and recovery, before rising above initial levels by the end of the strong subsequent economic expansion

Overall inequality in Indonesia over the period 1996 to 2010 – considered in terms of the Gini coefficient (Box 6) – is one of two sub-periods, with an equalizing period of crisis and recovery from 1996 to 2003 (where the richest saw the greatest declines in consumption and the slowest recovery, as discussed in the previous section), followed by a mostly increasing trend of inequality. It is important to note that inequality in Indonesia may not be as low as these estimates from the National Socio-economic Survey (Susenas) suggest (it is possible that the survey does not adequately capture the expenditures of the rich),¹³ but the broad trend of decreasing then increasing inequality over the period is most likely accurate.

Table 14: Inequality fell over the crisis and recovery period, before rising above initial levels by 2010

(Gini Coefficients, 1996 to 2010)

	1996	1999	2003	2007	2010
National, nominal	0.36	0.32	0.32	0.38	0.38
National, real	0.32	0.29	0.28	0.34	0.35
Urban, real	0.36	0.32	0.31	0.36	0.37
Rural, real	0.28	0.25	0.24	0.29	0.31

Sources: World Bank calculations and BPS

Box 6: There are several measures of inequality which seek to capture the distribution of households' economic outcomes

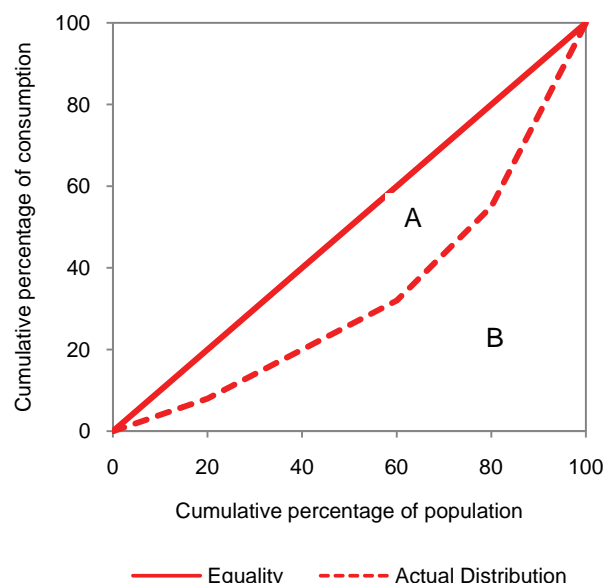
The Gini Coefficient is the most commonly used measure of inequality. It lies between 0 (perfect equality) and 1 (complete inequality), with a usual range between 0.3 and 0.5. Gini Coefficients are typically calculated from income or consumption distributions (with consumption distributions usually being more equal than their income counterparts, by an average of 0.075 points). The Gini is constructed from the Lorenz curve, shown to the side, which compares the cumulative frequency curve of the actual distribution (consumption in the case of Indonesia) to the cumulative frequency curve that would result if all individuals had the same consumption. The Gini is calculated as $A/(A+B)$, where A and B are the areas as indicated on the chart. While the Gini satisfies many of the desirable properties of an inequality measure, it is not easily decomposable or additive across groups, so that the national Gini is not equal to the sum of Ginis at the sub-national level (e.g. urban-rural or regional).

Commonly used inequality measures which have all the desirable properties are the Theil indices, belonging to the family of generalized entropy inequality measures. The general formula is given by:

$$GE(\alpha) = \frac{1}{\alpha(\alpha-1)} \left[\frac{1}{N} \sum_{i=1}^N \left(\frac{y_i}{\bar{y}} \right)^\alpha - 1 \right],$$

where y_i is the consumption for person i , \bar{y} is the mean consumption per person, and α is a parameter which represents the weight given to distances between consumptions at different parts of the income distribution and can take any real value. GE measures can take values between zero and infinity, with zero representing equality and higher values representing higher levels of inequality. For lower values of α , the measure is more sensitive to changes in the lower tail of the distribution, and for higher values of α , the measure is more sensitive to changes that affect the upper tail. The most common values of α used are 0, 1, and 2. Theil's T index is $GE(1)$ and Theil's L index is $GE(0)$, also known as the mean log deviation measure. For more information on the Gini Coefficient and Theil measures, see Haughton and Khandker (2009) *Handbook on Poverty and Inequality*.

Source: World Bank staff



¹³ See World Bank (2006), *Making the New Indonesia Work for the Poor*.

The fall and rise of inequality is most dramatically seen in the differences between the top and bottom consumption deciles

The dramatic decline in inequality over the crisis period of 1996 to 1999 can be seen by the per capita consumption ratio of the 90th and 10th percentiles, which declines from 3.67 to 3.29, and the ratio for the 75th and 25th percentiles, which falls from 1.95 to 1.85 (Table 15). Conversely, the increasing inequality between 2003 and 2007 can be seen in the increases of the same ratios over this period.

Table 15: A rise in the consumption of the rich relative to poorer households was seen from 2003 to 2007
(ratio of per capita consumption levels of the different percentiles in the distribution)

	1996	1999	2003	2007	2010
Percentile 75 / Percentile 50	1.43	1.39	1.36	1.49	1.54
Percentile 25 / Percentile 50	0.73	0.75	0.76	0.71	0.69
Percentile 10 / Percentile 50	0.58	0.60	0.60	0.55	0.53
Percentile 90 / Percentile 50	2.12	1.97	1.88	2.25	2.33
Percentile 75 / Percentile 25	1.95	1.85	1.80	2.09	2.25
Percentile 90 / Percentile 10	3.67	3.29	3.14	4.08	4.39

Source: World Bank calculations and BPS

Inequality within urban and rural areas constitutes most of overall inequality

The urban and rural trends in inequality generally follow the same pattern, with rural inequality being about 6 to 7 points lower than urban inequality, albeit closing slightly by 2010. Decomposition of inequality by urban-rural over time shows the proportion of inequality explained by within-group and between-group inequality is relatively stable over time. Within-group inequality explains a much higher share of total inequality than between-group (Table 16).

Table 16: Differences within urban and rural households is a much larger driver of national inequality than differences between them
(Decomposition of Inequality by Urban-Rural, 1996 to 2010)

	Theil L					Theil T				
	1996	1999	2003	2007	2010	1996	1999	2003	2007	2010
Location										
Urban	0.21	0.16	0.16	0.21	0.21	0.25	0.19	0.19	0.24	0.26
Rural	0.26	0.10	0.10	0.14	0.16	0.15	0.12	0.11	0.16	0.18
All groups	0.17	0.13	0.13	0.19	0.20	0.20	0.16	0.16	0.22	0.23
Share of inequality										
Within-group %	93.2	94.5	94.5	93.0	93.6	94.3	95.2	94.5	94.5	94.5
Between-group %	6.8	5.5	6.6	7.1	6.4	5.8	4.8	5.5	6.0	5.5

Source: World Bank calculations and BPS

f. A focus on promoting equality of opportunities is important as Indonesia transitions to a middle-income country

Equity is complementary to the pursuit of long-term prosperity

The World Bank's 2006 World Development Report focused on the relationship between equality of opportunity and long-term development. Its main message is that equity is complementary to the pursuit of long-term prosperity. Institutions and policies that promote a level playing field contribute to sustainable growth and development through two broad sets of reasons. First, market failures, especially for credit, insurance, land, and human capital, mean that resources may not flow where the returns are highest. For example, some highly capable children may not complete primary schooling while less able ones may finish university. Second, high levels of economic and political inequality tend to lead to economic institutions and social arrangements that systematically favor the interests of those with more influence, generating economic costs. Society, as a whole, is then more likely to be inefficient and to miss opportunities for innovation and investment.

Development policy needs to focus on equality of opportunities

The focus of development policy should be on equality of opportunities rather than incomes, which will always differ in some respect even with genuine equality of opportunity, due to preferences, talent, effort and luck. Thus public action should focus on the distribution of assets, economic opportunities and political voice: greater investment in the human resources of the poorest; more equal access to public services and information; and greater fairness in markets, such as credit and insurance. Correcting market failures is the ideal response; where this is not feasible or too costly, some forms of redistribution – of access to services, assets or political influence – can increase economic efficiency. Nevertheless, there may be various short-run policy-level tradeoffs between equity and efficiency. If individual incentives are blunted by income redistribution schemes that tax investment and production too steeply, the result will be less innovation, less investment and less growth. A balance must be sought, taking into account both the immediate costs to individual incentives and the long-term benefits of cohesive societies, with inclusive institutions and broad opportunities.

As Indonesia transitions to a middle income country, distribution of growth becomes more important

Indonesia has experienced considerable reduction in poverty over the past three decades. While further reductions are possible and necessary, a focus on the opportunities for those above the poverty line as well as the poor is important as Indonesia becomes a middle income country. Equality of opportunities and access promote both social stability and an inclusive society, as well as continued economic growth.

Previous periods of poverty reduction in Indonesia have been inequality increasing

The increase in inequality since the recovery from the crisis has already been noted, at the same time as poverty has fallen. For example, from 2000 until 2002, poverty fell by 1 percentage point, while inequality increased by nearly 4 points to 0.34 from 0.30 in 2000 (as measured by the Gini coefficient), a large rise in such a short time. Furthermore, from 2003 to 2010, poverty fell by four percentage points to 13.3 percent, while inequality increased by nearly 6 points to 0.38 from 0.32 in 2003. Growth patterns are partly behind the significant increase in the Gini coefficient. In addition, technological innovations as well as differing access to assets (human capital, finance) meant that the richer segments of the population were able to capture a larger share of the benefits from strong growth.

Policies promoting poverty reduction with equity will be important moving forward, including connecting disadvantaged regions...

Much of the economic disparity between households in Indonesia is regional. At the same time, some of the highest poverty rates are in the more remote areas of Indonesia. Current efforts to improve connectivity within Indonesia and abroad, as well as to accelerate economic growth across Indonesia, has the potential to be both poverty and inequality reducing. Lack of economic opportunities in more remote areas is often behind the higher poverty rates in Indonesia's periphery. Development policy should then focus on facilitating economic opportunities through a variety of levers (improving infrastructure, improving human capital, strengthening access to markets, etc.). The World Development Report in 2009 on economic geography discusses the type of policies that may have higher chances of success when trying to improve the lives of people in the periphery.

...continued investment in quality education for the poor ...

Investments in higher education are important if Indonesia is to move into higher-skilled industries. However, the large majority of Indonesians currently enjoy relatively low levels of education, particularly with respect to quality. Policies that focus on transition rates from primary school to junior high, and on the quality of education, are critical in unlocking the human capital potential that is untapped in Indonesia's poor and near-poor. Such policies can lead to better individual outcomes for the poor and greater economic growth for the nation.

...and continued support for social assistance and insurance safety nets...

Social safety nets are key to protecting poor and near-poor livelihoods, sustaining poverty reduction in presence of economic shocks or natural disasters, and helping the intergenerational exit of poverty and an increase in social mobility. Key programs include the expanding conditional cash transfer program (*Program Harapan Keluarga*, or PKH), which increases consumption for the poorest households while encouraging them to invest in their children's education and health for the future; and the SJSN framework for social insurance, which has expanded health insurance as a first objective, will also be critical in insulating households from shocks and preventing them from falling into poverty.

2. Looking towards a rising middle class in Indonesia

Strong domestic demand, particularly consumption, is behind Indonesia's resilience in the wake of the global financial crisis

Strong domestic demand, particularly consumption, has been a major factor in Indonesia's resilience in the wake of the global financial crisis. Private consumption, expanding by 4.6 percent in 2010 and 4.9 percent in 2009, has been a major driver behind recent economic growth and this is projected to continue in both 2011 and 2012. As consumption and income levels have risen so has the interest in the emergence of a middle class in Indonesia. A growing middle income class would provide additional support for domestic demand and growth going forward. There are few studies which actually measure how large the middle class is in Indonesia and how fast it is growing. This section aims to add to this evidence, focusing on the size and expenditure patterns of the middle class in Indonesia using household survey data.

a. Defining the middle class

The middle class can be defined in various ways

The notion of the middle class can be defined in various ways. It can encapsulate some socio-cultural aspects, for example, members of the middle class are generally affluent and prosper in society. Members of the middle class are more likely than low income households to purchase consumer durables, such as TV sets, fridges, motorcycles or cars, or to own assets such as housing. People in the middle class are likely to demand and consume advanced education, sophisticated health care and recreational services. Although the middle class is a social designation, most economists use income or expenditure patterns or levels to define the middle class. This article uses aggregate household expenditure levels to identify the middle class.

Three approaches to measure the middle class based on household expenditures or income are often used: absolute, relative, and hybrid...

There are three approaches to define the middle class based on household expenditures or income: (i) the absolute approach, (ii) the relative approach, and (iii) the hybrid approach. The absolute approach defines the middle class at a certain level of expenditure; individuals who earn (or spend) between certain upper and lower bounds are considered to be the middle class. The relative approach focuses a household's income or expenditure level relative to others. Per capita expenditure percentile figures are often used for the relative approach. The hybrid approach is combination of both the absolute and relative approaches.

...the choice amongst which depends on the purpose of the analysis

The choice among absolute, relative, and hybrid approaches depends on the purpose of analysis at hand. For example, Kharas and Gertz (2010)¹⁴ maintain that the absolute approach would be appropriate as a single measure to compare the size of the middle class across countries. Cannon (1980)¹⁵ concludes that the relative approach would be more appropriate to assess "status" or "well-being" of population, because relative hierarchies are important for well-being or status of the middle class. In other words, people perceive themselves as the middle class by comparing with others. This piece uses the absolute measure to allow for analysis of the changing number of people within different income classes and to facilitate comparisons with other countries.

b. How large is the middle class in Indonesia?

One definition of middle class is those people with daily per capita expenditures of US\$2-20

Using the absolute approach, this section defines the middle class as people whose per capita expenditure per day is between US\$2 and US\$20 in 2005 purchasing power parity terms. This follows the approach in recent work by the Asian Development Bank (2010) focusing on developing Asia.¹⁶

Between 2003 and 2010, the size of the middle class increased significantly in Indonesia.

Table 17 shows the population shares of the middle class based on this absolute measure, showing a significant increase in the middle class size between 2003 and 2010. During the same period, the size of the low income class has been shrinking while the size of the high income class increased, but from a very low base. Within the middle class, the increment is highest for population with expenditure of US\$2 – US\$6 per day. With

¹⁴ Kharas and Gertz, 2010, "The New Global Middle Class: A Cross-Over from West to East", Wolfenson Center for Development at Brookings.

¹⁵ Cannon, 1980, "On the absolute or relative basis of perception: the case study for middle class identification", Social Indicators Research, 8, pp. 347-363.

¹⁶ Asian Development Bank, 2010, "The Rise of Asia's Middle Class", in Key Indicators for Asia and the Pacific 2010, Manila.

continuing strong economic growth and similar distribution, these segments of the population are likely to move up to higher income brackets within the middle class in the near future, i.e. the share of the population with expenditures of US\$ 6-10 per day is expected to increase in coming years.

Table 17: The rising population share of Indonesia's middle class
(percent of population)

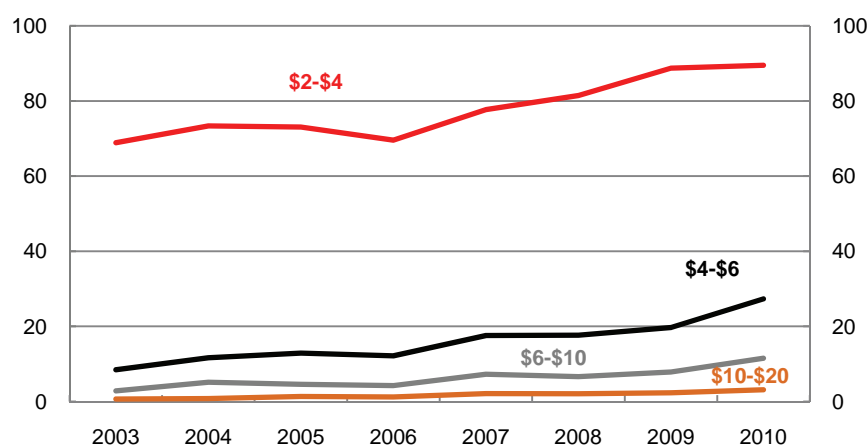
Class	Cut-off	2003		2010	
Low	< \$1.25	21.9%	62.2%	14.0%	43.3%
	\$1.25 – \$2	40.3%		29.3%	
Middle	\$2 - \$4	32.1%	37.7%	38.5%	56.5%
	\$4 - \$6	3.9%		11.7%	
	\$6 - \$10	1.3%		5.0%	
	\$10 - \$20	0.3%		1.3%	
High	> \$20	0.1%	0.1%	0.2%	0.2%

Note: Per capita expenditure per day is adjusted to the 2005 purchasing power parity terms
Source: SUSENAS and World Bank staff calculations

Around 50 million people have joined Indonesia's middle class over the past seven years

In 2003, about 81 million people were in the income brackets classified as the middle class. By 2010, this had grown to 131 million (Figure 35). Just over 7 million people per year moved from low income to the middle income class over this period. The increase in the middle class is dominated by increases in the US\$2-6 expenditure brackets.

Figure 35: Population increased significantly in the US\$2-6 expenditure brackets
(population defined as middle income class in Indonesia, million)



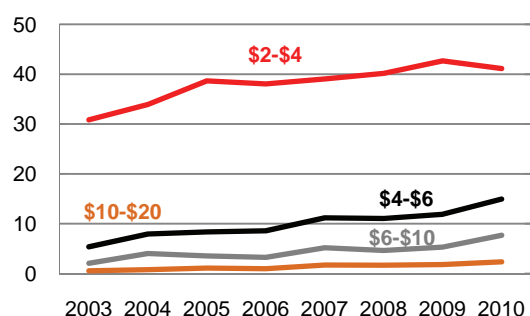
Note: the dollar value is per capita expenditure per day in 2005 purchasing power parity terms
Source: SUSENAS and World Bank staff calculations

The increase in the number of people in the middle class is similar in both urban and rural areas

The size of the middle class has increased in both urban and rural areas (Figure 36 and Figure 37), but there are also significant differences in their trends. While the increase in the middle class in urban areas was more pronounced in the years up to 2005, in rural areas the middle class increase has been more pronounced in the past few years, with the number of people with expenditure between US\$2-4 actually declining between 2004 and 2006.

Figure 36: In urban areas there are rising numbers in the higher-middle income class

(urban population defined as middle income class in Indonesia, million)



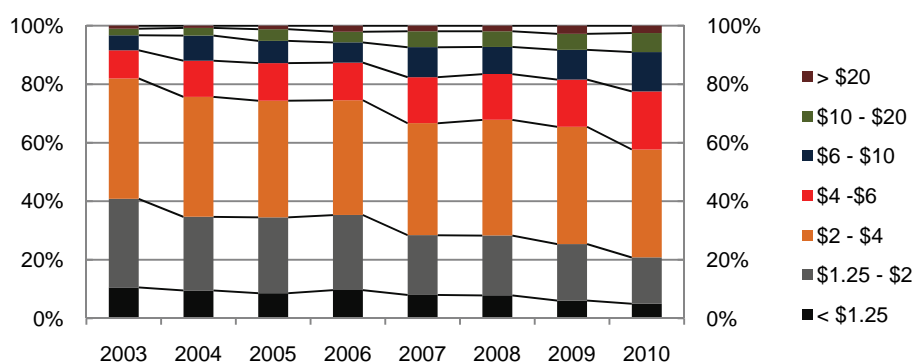
Note: the dollar value is per capita expenditure per day in the 2005 purchasing power parity terms

Source: SUSENAS and World Bank staff calculations

The share of the middle class on total expenditure has been increasing in line with their growing numbers

The expenditures of the middle class as a share of total expenditure grew from 58.1 percent in 2003 to 76.7 percent in 2010 (Figure 38). The expenditure share of the low income class (those with per capital expenditure below US\$2 per day) has been decreasing, a result of the decline in their numbers rather than a decline in expenditure per capita, consistent with the findings in Table 17. The share of expenditures from those who are just within the middle class groupings, i.e. with expenditures of US\$2-4, continues to dominate, but has been on the decline, from 41.1 percent in 2003 to 36.9 percent in 2010. Total expenditure by those in the US\$4-6 expenditure bracket exhibits the highest increase, moving from 9.6 percent in 2003 to almost 20 percent in 2010.

Figure 38: Indonesia's middle income class accounts for three-quarters of total expenditures (percent of total expenditures accounted for by different expenditure brackets)



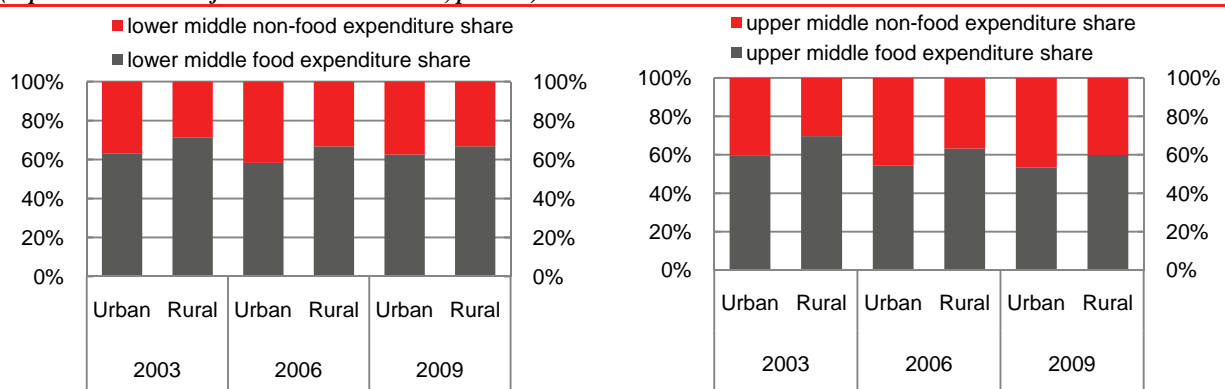
Note: Dollar value is daily per capita expenditure in 2005 purchasing power parity terms.

Source: SUSENAS and World Bank staff calculations

There are significant differences in the expenditure patterns within the middle class

As mentioned above, as people move into middle income status their total consumption levels rise but also their expenditure patterns change. For example, non-food expenditures are likely to rise. As expected, looking across the middle class groupings, the lower brackets consume a relatively large share of their expenditure on food while this share is significantly smaller for the richer segments (Figure 39). This is in line with what we observe for the low and high income brackets, where the share of the household's spending on food declines with income levels.

Figure 39: Non-food expenditures are greater for the higher middle-income groupings
(expenditure shares of middle income classes, percent)



Note: The lowest middle class is the segment of the population with expenditures of \$2-\$4 per day. The highest middle class is the segment of the population with expenditures of \$10-\$20 per day.

Source: SUSENAS and World Bank staff calculations

c. What does the emergence of a middle class mean for economic policy making?

The emergence of the middle class will have implications for policy making in the long run, in particular in relation to the type of public services demanded by a more affluent and sophisticated population and in terms of the impact on the structure of the economy

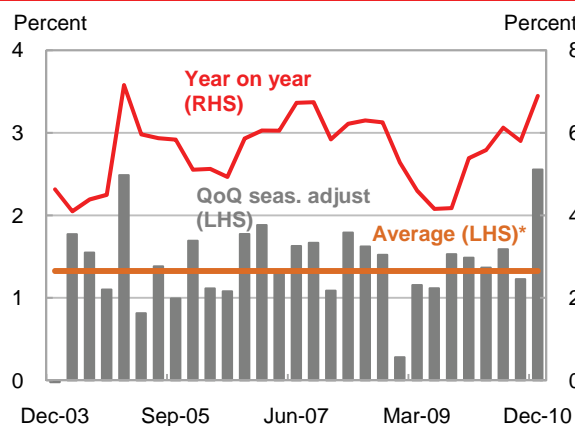
Indonesia's middle income class is growing. From 2003 to 2010, using the absolute measure, around 50 million people joined the middle class. Even though most of this growth has been in the lower segments of the middle class (US\$2-6 per capita per day), based on continued strong growth and current distribution patterns, more people will be joining the upper segments of the middle income bracket in the next few years. This development is likely to have significant impact on the structure of the economy and economic policy making.

The domestic demand of a larger middle class provides positive momentum behind Indonesia's robust growth. This will be particularly so in terms of demand for items such as consumer durables or leisure activities as people who join the higher middle income brackets shift their consumption towards non-food expenditures. Already Indonesia is seeing strong motorcycle and car sales, with the former up 20 percent per annum on average over the last three years, and this is expected to continue. The emergence of a middle class is also expected to benefit services sectors whose growth is likely to continue outpacing economy-wide growth, as the growing middle class demands higher quality, customized and modern services.

The middle class can also be a driver of growth from the supply-side of the economy. For example, a growing middle class is thought to be one of the keys to the deepening of financial markets, as the greater accumulation of savings by the middle classes will need, and stimulate, a larger and more sophisticated financial sector to channel those savings into productive activities. There will also likely be a shift in the type of health care and education services to satisfy the growing needs of the middle class, particularly for higher education and more sophisticated health care services. The consumption of these services in turn will foster improvements in human capital. Policymakers will need to respond to these changing demands, for example, through a combination of enhancing public provision and facilitating rising private provision. These sorts of shifts in the provision of such goods and services cannot be accomplished over a short period of time. Sufficient time will therefore be needed to develop the appropriate sectoral strategies that will result in a level and quality of service provision that meets the needs of an expanding middle class.

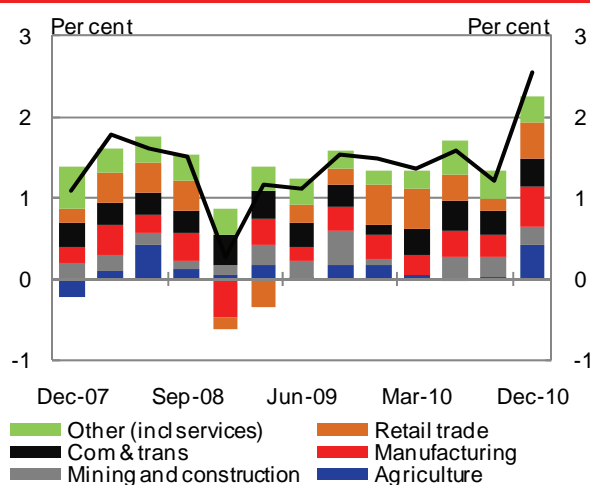
APPENDIX: A SNAPSHOT OF INDONESIAN ECONOMIC INDICATORS

Figure 1: GDP growth moderates
(percent growth)



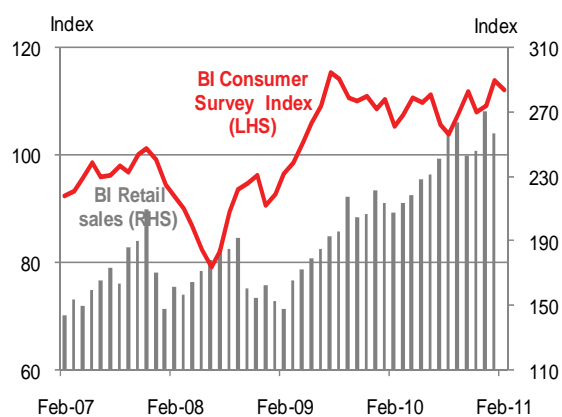
*Average QoQ growth between Q1 2000 – Q3 2010.
Sources: BPS, World Bank seasonal adjustment

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



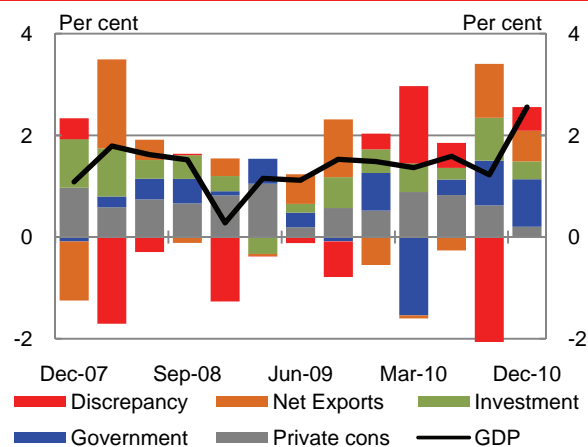
Source: BPS via CEIC

Figure 5: Consumer indicators
(index levels)



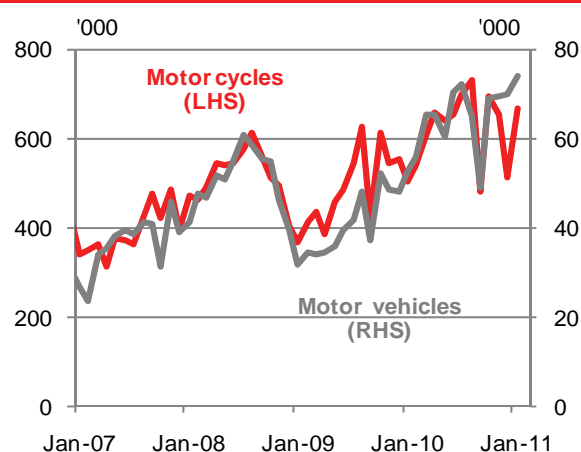
Source: BI via CEIC

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



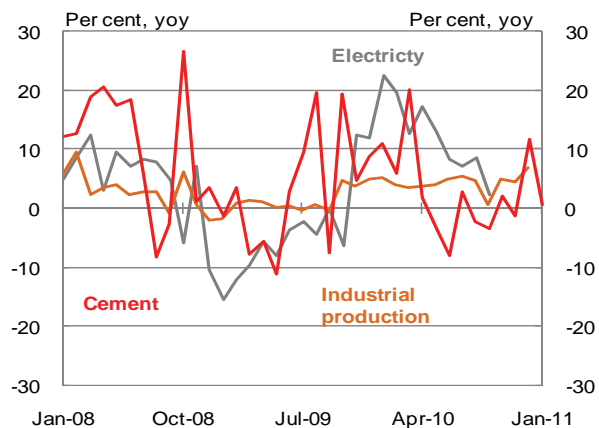
Source: BPS via CEIC and World Bank

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



Source: CEIC

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



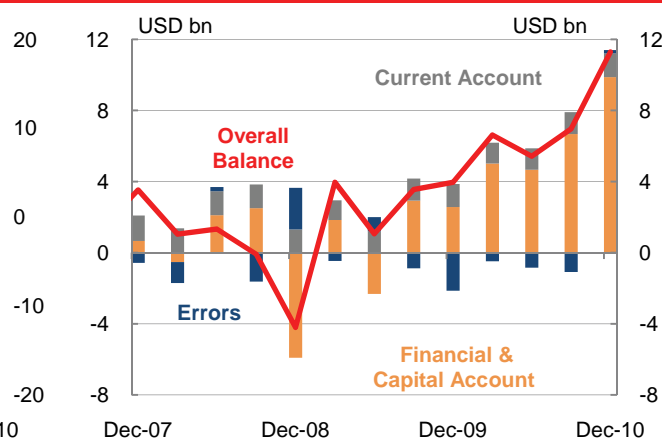
Source: CEIC

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



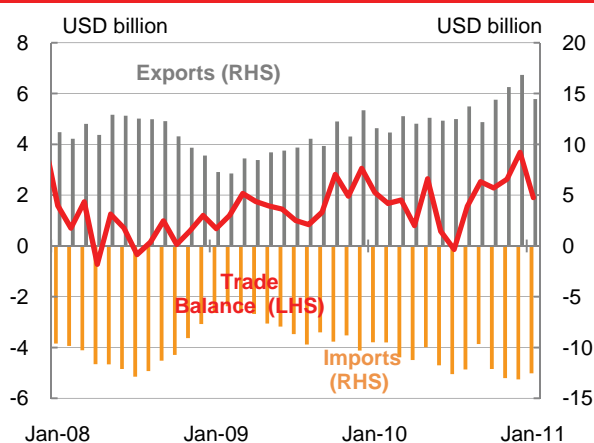
Source: CEIC

Figure 8: Balance of Payments
(USD billions)



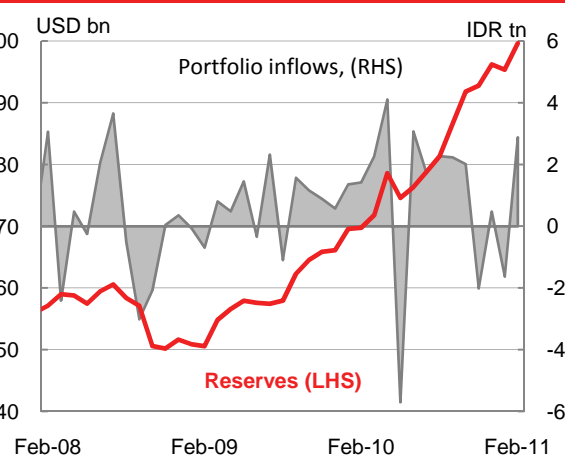
Source: BI and World Bank

Figure 9: Trade balance
(USD billions)



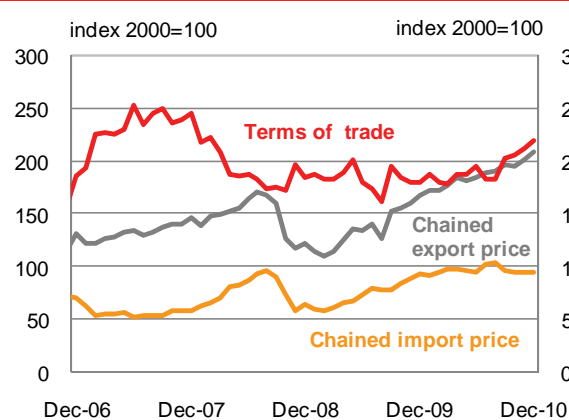
Source: BPS and World Bank

Figure 10: International reserves and capital inflows
(USD billions)



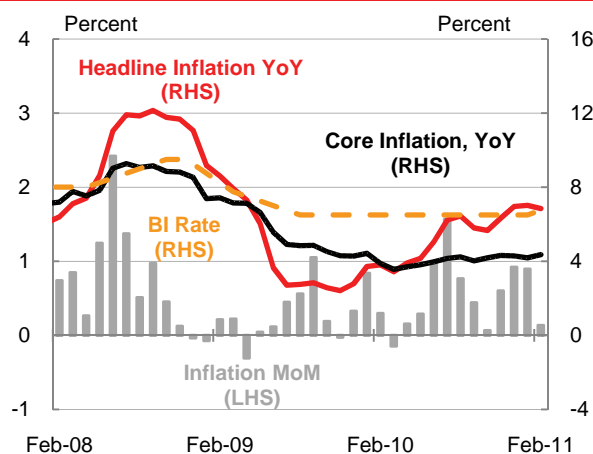
Source: BI and World Bank

Figure 11: Terms of trade and monthly export and import chained Fisher-Price indices
(index)



Source: BPS and World Bank

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



Source: BPS and World Bank

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

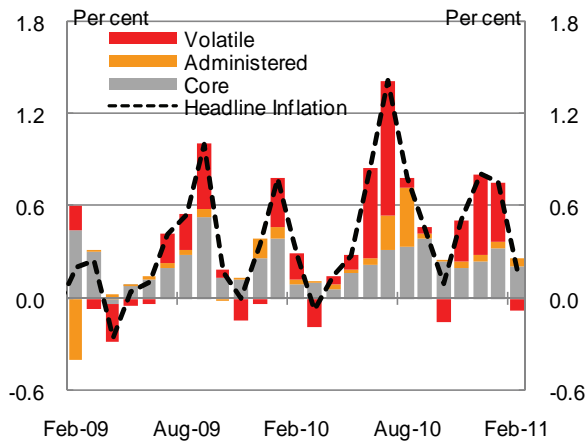
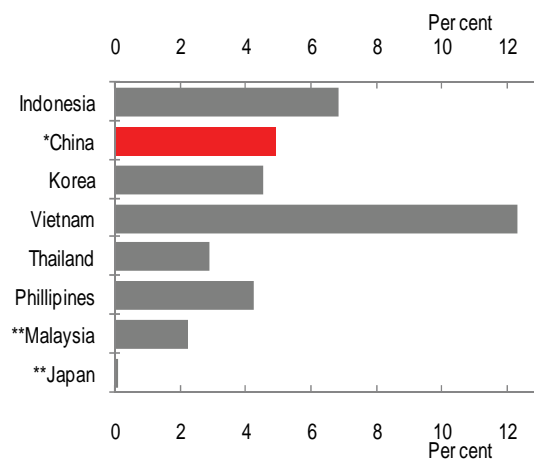
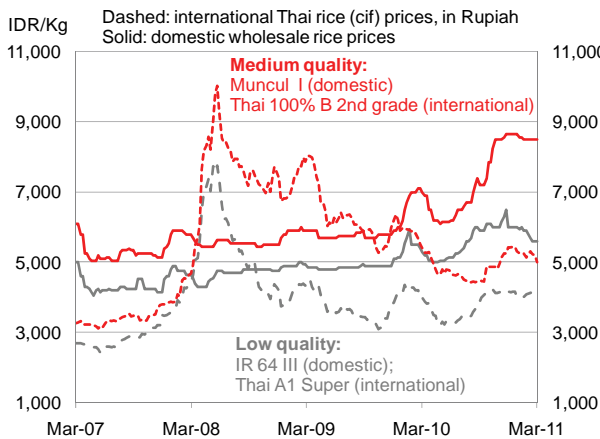


Figure 14: Inflation amongst neighboring countries
(year-on-year, February 2010)



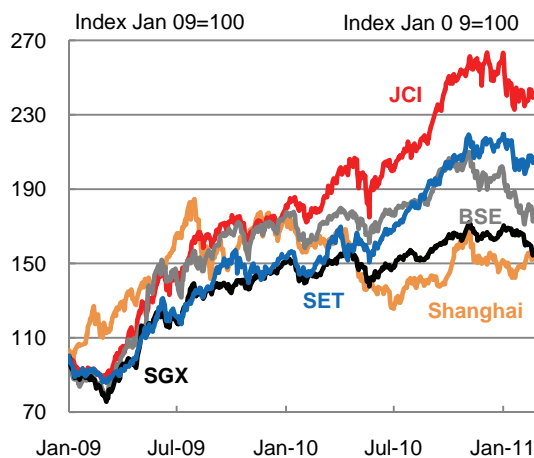
Sources: BPS and World Bank

Figure 15: Domestic and international rice price comparison
(IDR per kg)



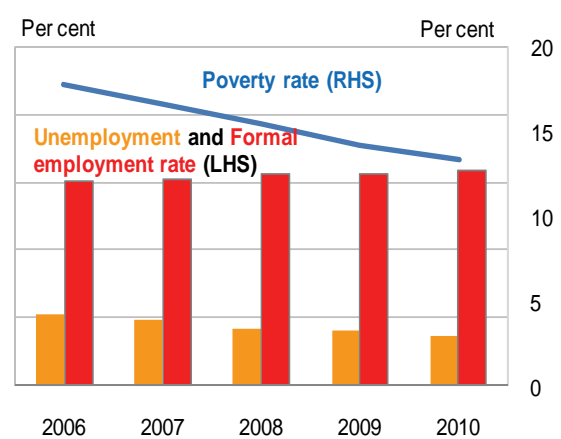
Sources: PIBC, FAO and World Bank

Figure 17: Regional Equity Indices
(daily, index)



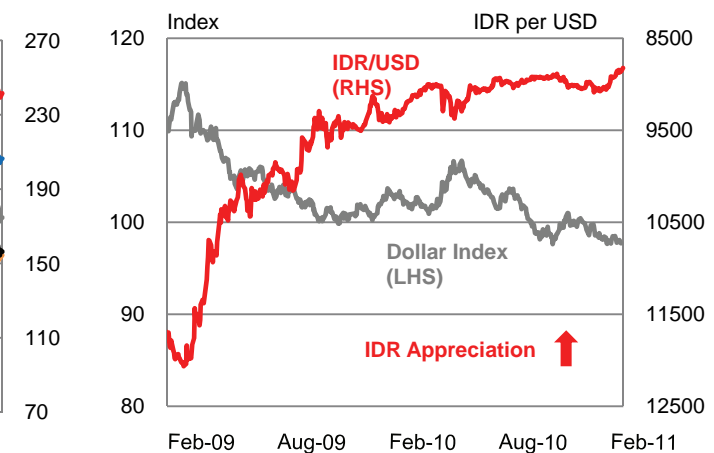
Sources: World Bank and CEIC

Figure 16: Poverty, employment, and unemployment rate
(yearly data points)

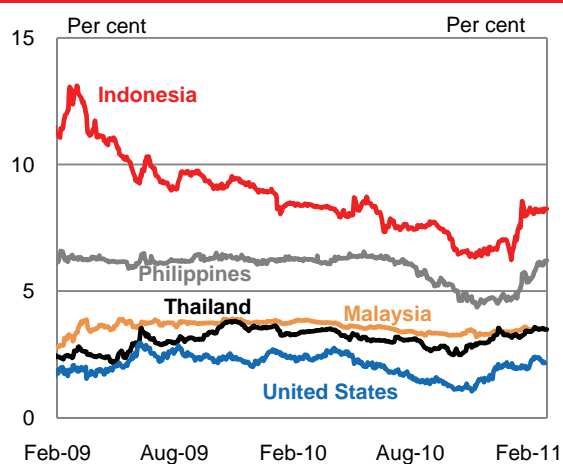
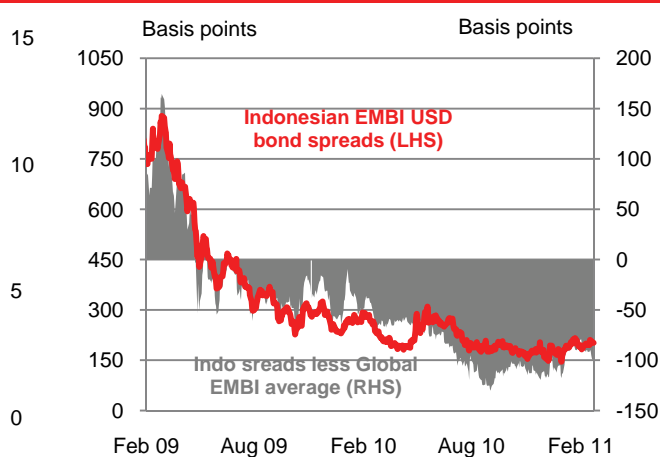


Labor data from February Sakernas
Source: BPS, and World Bank

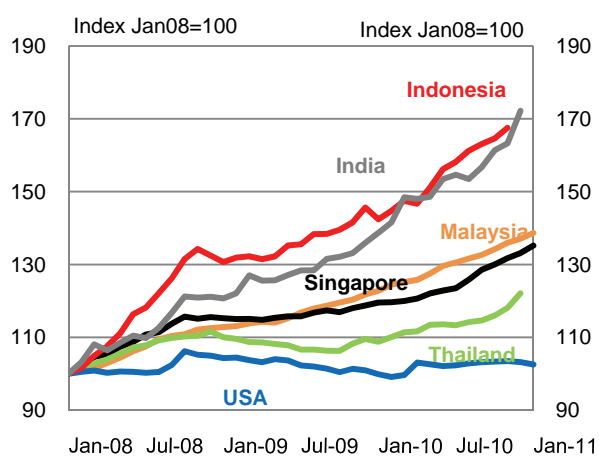
Figure 18: Broad Dollar Index and Rupiah Spot
(daily, index and levels)



Sources: World Bank and CEIC

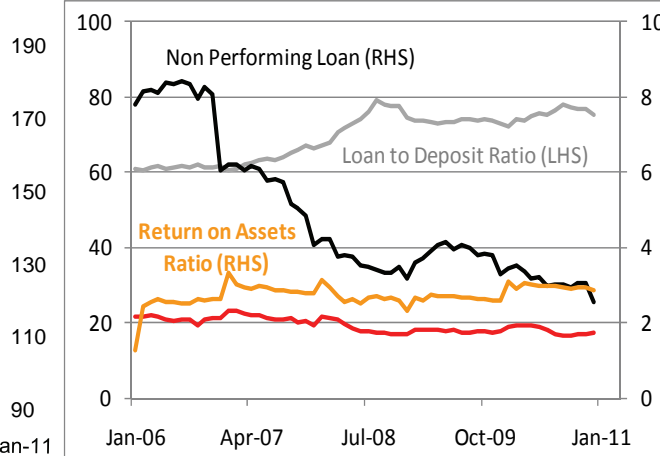
Figure 19: 5 Year Local Currency Government Bond Yields
(daily, percent)**Figure 20: Sovereign USD Bond EMBI Spreads**
(daily, basis points)

Sources: World Bank and CEIC

Figure 21: International Commercial Bank Lending
(monthly, index)

Sources: World Bank and CEIC

Sources: World Bank and CEIC

Figure 22: Banking Sector Financial Indicators
(monthly, percent)

Sources: BI and World Bank

Table 18: Budget outcomes and estimates
(IDR trillion)

	2009	2010	2011 (p)	2011 (p)
	Outcome	Outcome	Budget	WB estimates*
A. State revenue and grants	848.8	1,014.0	1,104.9	1,148.8
1. Tax revenue	619.9	744.1	850.3	846.8
<i>o/w income tax</i>	317.6	356.6	420.5	423.3
- Oil and gas	50.0	58.9	55.6	68.3
- Non oil and gas	267.5	297.7	364.9	355.1
2. Non-tax revenue	227.2	267.5	250.9	302.0
<i>o/w natural resources</i>	139.0	170.1	163.1	191.1
i. Oil and gas	125.8	152.7	149.3	170.9
ii. Non oil and gas	12.8	17.3	13.8	20.1
B. Expenditure	937.4	1,053.5	1,229.6	1,212.6
1. Central government	628.8	708.7	836.6	818.4
2. Transfers to the regions	308.6	344.7	393.0	394.2
C. Primary balance	5.2	48.9	-9.4	49.9
D. SURPLUS / DEFICIT	(88.6)	(39.5)	(124.7)	(63.8)
Deficit (percent of GDP)	(1.6)	(0.6)	(1.8)	(0.9)

Note: *World Bank revenue forecasts are based on a different methodology to the government to derive projections for nominal GDP

Source: MoF and World Bank estimates

Table 19: Balance of Payments
(USD billion)

		2009				2010					
	2008	2009	2010	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Balance of Payments	-1.9	12.5	30.3	4.0	1.1	3.5	4.0	6.6	5.4	7.0	11.3
<i>Per cent of GDP</i>	-0.4	2.3	4.3	3.5	0.8	2.4	2.6	4.1	3.1	3.7	6.1
Current Account	.1	10.2	6.3	2.6	2.6	1.5	3.5	2.1	1.6	1.4	1.2
<i>Per cent of GDP</i>	0.0	1.9	0.9	2.3	1.9	1.0	2.3	1.3	0.9	0.7	0.7
Trade Balance	9.9	20.5	21.6	4.2	5.1	4.3	6.8	4.9	4.7	5.5	6.5
Net Income & Current Transfers	-9.8	-9.2	-16.0	-1.6	-2.1	-2.3	-3.2	-3.2	-3.4	-4.1	-5.3
Capital & Financial Accounts	-1.8	5.0	26.2	1.8	-2.3	2.9	2.6	5.0	4.7	6.7	9.9
<i>Per cent of GDP</i>	-0.4	0.9	3.7	1.6	-1.7	2.0	1.7	3.1	2.7	3.6	5.3
Direct Investment	3.4	2.6	9.8	.6	.6	.6	.8	2.5	2.3	1.6	3.4
Portfolio Investment	1.8	10.3	15.2	2.0	1.9	3.0	3.5	6.2	1.1	6.0	2.0
Other Investment	-7.3	-8.1	1.1	-8	-4.8	-7	-1.8	-3.6	1.3	-9	4.5
Errors & Omissions	-.2	-2.7	-2.2	-.5	.8	-.9	-2.1	-.5	-.8	-1.1	.2
Foreign Reserves*	51.6	66.1	96.2	54.8	57.6	62.3	66.1	71.8	76.3	86.6	96.2

Note: * Reserves at end-period.

Source: BI and BPS



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