

2. Fiscal Policy: Dampening Cyclical Fluctuations and Supporting Inclusive Growth

Sustained rapid growth, macroeconomic stability, and improvements in living standards are some of the remarkable achievements of Asian economies over the past decade. Nevertheless, important challenges remain, as countries strive to maintain robust long-term growth, reduce income inequality, and fight poverty. Against this background, this chapter assesses whether fiscal policy has contributed to lower output volatility in Asia in the last decade and discusses how it can help address the critical challenges ahead.

A number of conclusions emerge from the analysis. Fiscal policy has become more countercyclical in the past 10 years, and discretionary policies have been effective in dampening the business cycle. Indeed, for the period 2001–11, when real GDP per capita fell by 1 percentage point relative to its trend, real government expenditure is estimated to have responded by an increase of 1 percentage point on average, compared to a softer response of 0.3 percentage points over 1980–2011. Moreover, fiscal multipliers are typically positive across the region and in some cases above 1.

Building on the progress achieved over the past decade, fiscal policy can play a key role in laying the foundations for sustainable and inclusive growth in Asia. In many economies, public investment could help more to fill the considerable infrastructure gaps, especially in Indonesia, Nepal, the Philippines, and Sri Lanka. At the same time, fiscal risks stem from investment spending conducted outside of the general government budget and from public-private partnerships in some economies; countering those risks requires that public spending management and fiscal transparency be enhanced, in particular, by fully reporting all forms of investment expenditure in the general government accounts. In most of

Asia, public spending on education and health—typically about 4 percentage points of GDP lower than in peers in other regions and not offset by higher private spending—could be scaled up to enhance human capital and living conditions. Expenditures could also be better targeted to the poor. Distortive food and energy subsidies, which impose a direct fiscal cost of more than 2 percent of GDP per year in China, Indonesia, Korea, Malaysia, and South Asia, could be gradually phased out and replaced by targeted programs such as direct cash transfers.

Further space for social spending and continued countercyclical fiscal policies could also be created by reducing complex and poorly targeted tax incentives. In a number of Asian economies, revenue administration could be enhanced by boosting the capacity of revenue agencies and strengthening their powers in accessing information and conducting audits. Some economies could also consider making their current revenue structure more growth-friendly by expanding the use of general consumption taxes and property taxes and reducing their reliance on corporate income taxation.

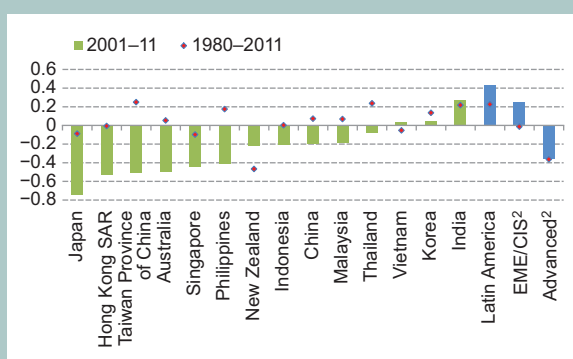
The Role of Fiscal Policy in Dampening Cyclical Fluctuations in Asia¹

In the last decade, most Asian economies have pursued more countercyclical fiscal policies than in the 1980s and 1990s (Figure 2.1). In the aftermath of the 2008–09 global financial crisis, for example, policymakers took several fiscal measures to cushion the downturn, in contrast with the 1997–98 Asian crisis, when they had to cut spending in the

Note: The main author of this chapter is Edda Zoli. Statistical support and analytical inputs were provided by Roberto Guimarães, Phurichai Rungcharoenkitkul, and Dulani Seneviratne.

¹This section is based on a forthcoming IMF working paper by Roberto Guimarães and Phurichai Rungcharoenkitkul.

Figure 2.1

Correlation between Government Spending and GDP¹

Sources: IMF, World Economic Outlook database; and IMF staff estimates.

¹ Correlations between the cyclical components of real government expenditure per capita and real GDP per capita. A positive (negative) correlation indicates procyclical (countercyclical) fiscal policy.

² Advanced economies excluding Asia. EME/CIS stands for Emerging Europe and Commonwealth of Independent States.

midst of collapsing activity (Figure 2.2).² Indeed, econometric analysis based on a panel of the 14 largest economies in Asia finds that in 2001–11, when real GDP per capita declined by 1 percentage point relative to its trend, real government expenditure per capita increased on average by 1 percentage point, versus only 0.3 percentage point for the period 1980–2011.³ This countercyclical response over the past decade was three times stronger than that estimated for non-Asian

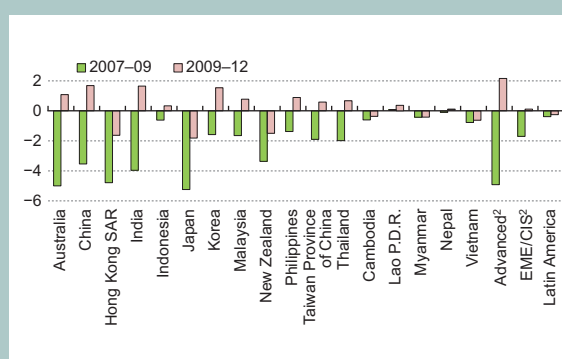
² Discretionary fiscal measures introduced in Asian economies in 2009 imparted an average stimulus of about 2.5 percent of GDP, larger than the G-20 average (2.0 percent of GDP) and higher than in past recessions (see IMF, 2009).

³ The empirical analysis focuses on government spending, in line with most of the literature (see Kaminsky and others, 2005, for a discussion on this issue). To address the simultaneity between government spending and economic activity, the model is estimated by panel GMM, and domestic GDP is instrumented by (trade-weighted) trading partner GDP. To a very large extent, changes in government expenditure reflect discretionary fiscal policy, as automatic stabilizers embedded in public spending are not very sizable, especially in Asia.

Figure 2.2

Fiscal Impulse, 2007–12¹

(In percent of potential GDP)



Source: IMF staff estimates.

¹ Changes in general government cyclically adjusted fiscal balance in percent of potential GDP. A negative (positive) number indicates a stimulus (withdrawal of fiscal stimulus).

² Advanced economies excluding Asia. EME/CIS stands for Emerging Europe and Commonwealth of Independent States.

advanced economies, which have long followed countercyclical policies.⁴ It is also in contrast with the procyclical fiscal policy behavior that continued to prevail in other regions, where only a minority of countries appears to have graduated from long-standing procyclicality seen in emerging market economies (EMEs) and low-income countries (LICs) (Frankel, Vegh, and Vuletin, 2011; Guimãres and Rungcharoenkitkul, forthcoming). India and Vietnam, having become more procyclical in the past decade, stand out as exceptions within emerging Asia.

What can explain the ability of some economies, in particular Asian ones, to run countercyclical fiscal policies? Two factors may have played a role:

- *More ample fiscal space.* In bad times emerging economies have often been unable to borrow—or only at very high interest rates—and hence have been forced to cut spending. Thanks to sound macroeconomic policies over the past

⁴ For both Asian economies and non-Asian advanced economies, the degree of countercyclicality is found to be symmetric during booms and recessions.

decade, public debt ratios and fiscal deficits declined or remained relatively low in nearly all Asian economies, allowing room for countercyclical support during downturns. Moreover, cushions were built to address external financing shocks, thus reducing external borrowing constraints. For example, current account balances increased from an average of -2.0 percent of GDP in the 1990s to an average of 2.9 percent in the 2000s, while official reserves rose to 6.1 months of imports from 3.8 months over the same period.

- *Stronger institutions.* Countries with greater political stability—stemming from government unity, strong parliament and/or popular support—less corruption, and a better bureaucracy are more likely to resist the temptation to expand public spending during booms, thus also creating more fiscal space for countercyclical fiscal policies during downturns.⁵ Indeed, in Asia there is a negative relationship between an index of institutional strength and procyclicality of fiscal policy (Figure 2.3)—a result also confirmed by the econometric analysis. Thus, stronger institutions in the past decade may have contributed to increased countercyclicality of fiscal policy.⁶

Has Discretionary Fiscal Policy Helped Dampen Business Cycles?

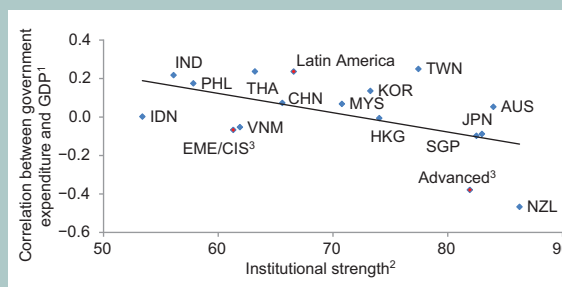
More countercyclical fiscal policies have been effective in smoothing output fluctuations since the mid-1990s. New evidence based on structural

⁵Theoretical models and empirical evidence on the relationship between institutional strength and procyclicality of fiscal policy are presented, for example, in Tornell and Lane (1999); and Alesina, Campante, and Tabellini (2008).

⁶The International Country Risk Guide Index, for instance, points to stronger institutions in Asia in the past 10 years (www.prsgroup.com/icrg.aspx).

Figure 2.3

Procyclicality and Institutional Strength, 1980–2011



Sources: IMF, *World Economic Outlook*; International Country Risk Guide; and IMF staff estimates.

¹ Correlations between the cyclical components of real government expenditure per capita and real GDP per capita. A positive (negative) correlation indicates procyclical (countercyclical) fiscal policy.

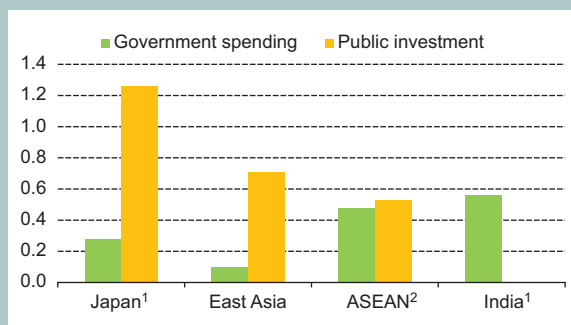
² Index ranging between 0 and 100, with a higher score indicating higher political stability, better bureaucracy quality, fewer conflicts and less corruption.

³ Advanced economies excluding Asia. EME/CIS stands for Emerging Europe and Commonwealth of Independent States.

VARs suggests that government spending and investment multipliers in Asian economies are typically positive, and in some case above 1 (Figure 2.4).⁷ The estimated range of multiplier values is in line with that found in the literature for advanced economies and higher than that typically estimated for EMEs and LICs (Spilimbergo, Symansky, and Schindler, 2009). These multipliers are larger than in previous studies on Asia (Ducanes and others, 2006; Jha and others, 2010; Tang, Liu, and Cheung, 2010), possibly reflecting the effectiveness of the stimulus extended in 2008–09, whose effect was not fully captured due to an earlier sample period.

⁷The VAR model includes the following variables: international oil prices, the consumer price index, real GDP at market prices, the three-month nominal interest rate, and real government spending (or public investment). Consistent with Blanchard and Perotti (2002), the key identification assumption is that government expenditure does not react to shocks to GDP within a quarter, owing to delays in spending decisions.

Figure 2.4
Multipliers for Government Spending and Public Investment in Asia, Four-Quarters
 (1996:Q2–2012:Q1)



Sources: IMF, World Economic Outlook database; Tapsoba (forthcoming); and IMF staff estimates.

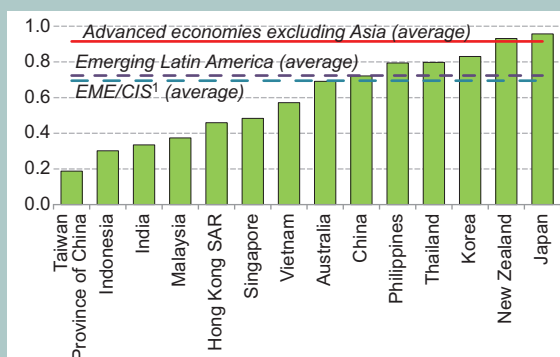
¹ For Japan and India, multipliers are the average of VAR estimates and DSGE model simulations.

² ASEAN includes Indonesia, Malaysia, the Philippines, Singapore, and Thailand.

The size of multipliers seems to be associated with country characteristics that are consistent with theoretical predictions and the empirical evidence for countries in other regions (Spilimbergo, Symansky, and Schindler, 2009; Ilzetzki, Mendoza, and Végh, 2011). Specifically, multipliers are generally small in very open economies, such as Singapore and Hong Kong SAR, owing to their high propensity to import, which creates “leakages” in the impact of discretionary measures. Multipliers also tend to be lower in countries with higher public debt, such as Japan and India. Multipliers are typically larger for investment than for government spending, as the former directly contributes to GDP and often has a smaller import content than the latter (e.g., construction). In China, Hong Kong SAR, and Indonesia the multiplier for public investment is positive, while that for government spending does not appear to be significant. For Indonesia, a low estimated government spending multiplier may be due to the large subsidy component of public expenditure, which is typically acyclical or even procyclical.

While discretionary fiscal policy appears to have been effective in smoothing economic fluctuations, countercyclicity could be enhanced by strengthening automatic stabilizers, which

Figure 2.5
Automatic Stabilizers, 2001–11
 (Correlation between output gaps and cyclical fiscal balances)



Source: IMF staff estimates.

¹ EME/CIS = Emerging Europe and Commonwealth of Independent States.

remain relatively small in emerging Asia (Figure 2.5). This would require boosting revenues and spending components (e.g., unemployment benefits) that are more sensitive to the cycle. Countercyclicity will also need to remain equally strong in booms and recessions, which requires building adequate fiscal space during periods of favorable cyclical conditions. In this respect, well-designed fiscal rules and fiscal councils— independent agencies providing unbiased budget forecasts and nonpartisan assessments of fiscal policy—can help foster fiscal discipline (April 2013 *Fiscal Monitor*, IMF, 2013c).

Increasing Space to Support Sustained and Inclusive Growth

Fiscal policy management in Asia has improved, but important challenges remain. In the near term, budget consolidation has to proceed as the recovery takes hold in order to rebuild the fiscal space needed both for future countercyclical measures and for addressing forthcoming fiscal pressures— not least related to aging. At the same time, several Asian EMEs and LICs have to create room for higher infrastructure and social spending to support long-term growth and inclusiveness. In China, there is the need to strengthen household income and consumption for economic rebalancing, which is

key to growth sustainability.⁸ Against this backdrop, this section identifies common areas where the design and implementation of tax and expenditure policies could be enhanced in view of the critical challenges ahead. The focus is primarily on EMEs and some LICs in the region, while other critical reforms, such as addressing fiscal pressures from aging, are not discussed here.

Boosting Revenue Intake

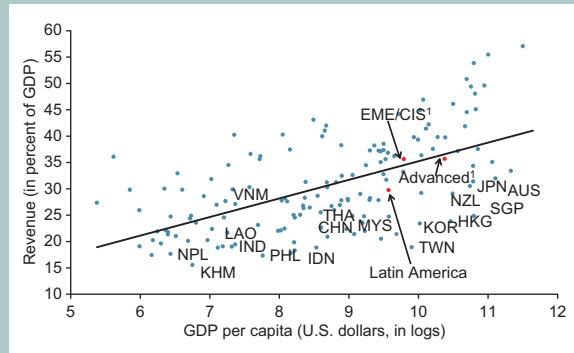
Across most of Asia, tax revenues are low in comparison with other economies at the same income level (Figure 2.6). In Asian EMEs and LICs, the average ratio of revenues to GDP in 2011 was 19 percent, compared with 30 percent in Latin America and 37 percent in emerging Europe/Community of Independent States. The relatively low revenue intake partly reflects an explicit policy choice favoring a low tax environment; but tax yields, which broadly control for differences in tax rates, also tend to be small in several Asian EMEs and LICs. Specifically:

- Income tax yields—as measured by the ratio of income tax revenue in percent of GDP to the tax rate—in most of ASEAN and in South Asia are lower than in peers and advanced economies (Figure 2.7). Corporate income tax yields are particularly weak in some LICs (Bangladesh, Cambodia, and Nepal), Sri Lanka, and Japan (Figure 2.8).
- Yields from the value added tax (VAT) or sales taxes are especially low in Lao People’s Democratic Republic, Malaysia, the Philippines, and South Asia (Figure 2.9). VAT yields are remarkable, however, in Thailand, where the system allows only very few exemptions, and in Vietnam thanks to the 2006–10 tax reform.

⁸ See IMF (2011d) for evidence on poverty and inequality in Asia; Budina and Tuladhar (2010) and Seneviratne and Sun (2013) for evidence on infrastructure shortages in the region; and IMF (2012b) for a discussion of economic rebalancing in China.

Figure 2.6

General Government Revenue and GDP per Capita, 2011



Source: IMF, World Economic Outlook database.

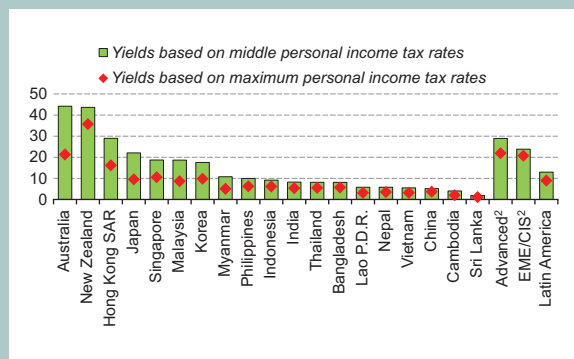
¹ Advanced economies excluding Asia. EME/CIS stands for Emerging Europe and Commonwealth of Independent States.

Three broad factors help explain low tax yields:

- *Narrow tax bases.* Tax bases tend to be small because of tax incentives and widespread tax exemptions that often reflect explicit policy choices, but are sometimes inefficient. For instance, for the Philippines a number of studies found the tax incentive system too generous and unnecessarily complex. Tax holidays and reduced corporate tax rates

Figure 2.7

Yields from Personal Income Tax¹ (2011 or latest, in percent)

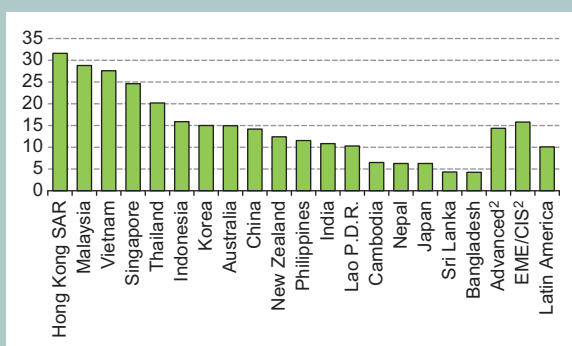


Sources: IMF, Government Finance Statistics database; World Economic Outlook database; World Bank, World Development Indicators database; taxrates.cc; OECD; and IMF staff calculations.

¹ Defined as tax revenue in percent of GDP divided by the middle or maximum tax rate.

² Advanced economies excluding Asia. EME/CIS stands for Emerging Europe and Commonwealth of Independent States.

Figure 2.8
Yields from Corporate Income Tax¹
 (2011 or latest; in percent)

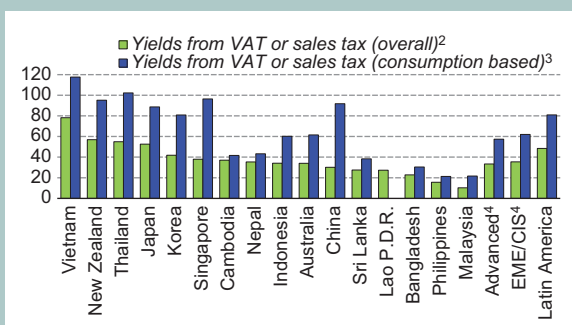


Sources: IMF, Government Finance Statistics database; World Economic Outlook database; World Bank, World Development Indicators database; taxrates.cc; OECD; and IMF staff calculations.
¹ Defined as tax revenue in percent of GDP divided by the tax rate.
² Advanced economies excluding Asia. EME/CIS stands for Emerging Europe and Commonwealth of Independent States.

are particularly ineffective, as they create distortions between and within sectors, provide opportunities for tax abuse (e.g., transfer pricing), attract uncommitted firms that leave as soon as the incentive expires, and have been unable to boost FDI to the country (Aldaba, 2006; Botman, Klemm, and Baqir, 2008; Reside, 2006, 2007; and IMF, 2012a). In Sri Lanka, the growing number of exemptions in consumption and corporate taxation has eroded the tax base (World Bank, 2012a).

- *Deficiencies in tax administration.* Despite reform efforts (e.g., in Indonesia starting in 2001), tax administration remains weak in a number of countries because of understaffing and insufficient training, among other issues. For instance, the number of tax office personnel per 1,000 people is 0.2 on average in Asian EMEs and LICs, compared with 0.8 in non-Asian advanced economies and 0.6 in peers in other regions.
- *Sizable informal sector.* The shadow economy was estimated to average 21 percent of GDP in Asian EMEs and LICs in 2007, larger than the 14 percent estimated for non-Asian advanced economies, but smaller than in other emerging economies (38 percent) (Schneider, Buehn, and Montenegro, 2010).

Figure 2.9
Yields from VAT and Sales Tax¹
 (In percent)



Sources: IMF, Government Finance Statistics database; World Economic Outlook database; taxrates.cc; World Competitiveness Online; OECD; and IMF staff calculations.
¹ For economies that have both VAT and sales tax, data refer to the VAT.
² VAT or sale tax revenues in percent of GDP, divided by the standard tax rate.
³ VAT or sale tax revenues in percent of private consumption, divided by the standard tax rate.
⁴ Advanced economies excluding Asia. EME/CIS stands for Emerging Europe and Commonwealth of Independent States.

While there is room for enhancing the efficiency of individual taxes in Asia, is there also scope for improving the overall tax revenue structure to make it more growth-friendly? Theoretical considerations and empirical evidence suggest that property and consumption taxes tend to have comparatively more benign effects on growth than other tax instruments (Johansson and others, 2008; Arnold and others, 2011). At the other end of the spectrum, corporate income taxes—a form of capital taxation affecting investment decisions—are typically most harmful to growth.

A well-implemented value added tax (VAT), in particular, is considered a relatively efficient tax since it avoids creating large distortions between the relative prices of goods and in saving decisions (Ebrill and others, 2001). Such benefits are best reaped when the VAT features a broad base, a

single rate, and a fairly high threshold to exclude traders with little revenue potential relative to the administration and compliance costs involved.

Property taxes are also deemed to be an efficient and equitable mode of collection. Due to a relatively immobile tax base, they are less vulnerable to international tax competition and entail smaller distortions than others. Since real estate values are often boosted by public spending on infrastructure in the surrounding area, property taxes may also help recover some of the costs thereby incurred (IMF, 2011a). As real estate values reflect the provision of local services, they are especially appropriate for local governments and can be an important autonomous source of revenues for them.

Against these arguments, the broad mix of taxes in some Asian economies appears to be suboptimal. Indeed, in a number of economies, corporate income taxation makes up a relatively larger share of tax revenues than general consumption and property taxes, in contrast with the revenue structure in advanced economies and EMEs in other regions (Figure 2.10). For countries rich in natural resources (e.g., Indonesia, Malaysia, and Mongolia), the importance of corporate income taxation reflects a reliance on revenues from the oil or mineral sectors which, although easy to administer, can be volatile and procyclical. Reliance on corporate income tax revenues is also sizable in Hong Kong SAR, India, the Philippines, Singapore, Thailand, and Vietnam.

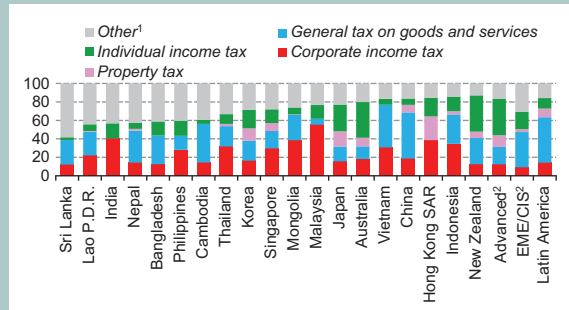
Enhancing the Efficiency and Composition of Public Spending

Public spending can play a crucial role in supporting more inclusive growth, and fostering human and physical capital accumulation (IMF, 2004). What resources do Asian economies devote to key public expenditure components, and do they use them efficiently to achieve those goals?

Fiscal policy could help fill the infrastructure gaps in a number of countries through public investment and the promotion of public-private

Figure 2.10

Selected Tax Revenues by Category (In percent of total tax revenue, 2011 or latest available)



Sources: IMF, Government Finance Statistics database, and World Economic Outlook database; OECD; and IMF staff calculations.

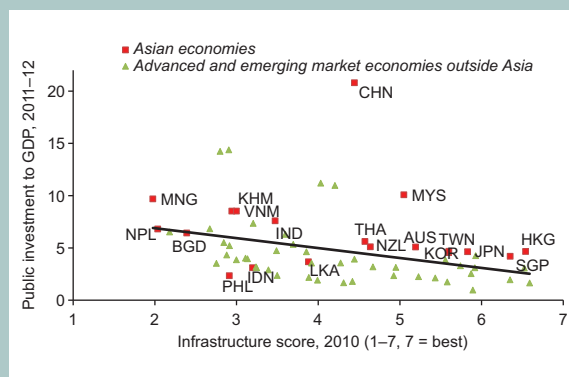
¹ Includes excise tax, international trade and transactions tax, tax on profits of fiscal monopolies, unallocated taxes on profit/income, and other taxes.

² Advanced economies excluding Asia. EME/CIS stands for Emerging Europe and Commonwealth of Independent States.

partnerships. For example, sustained public investment over the past decade appears to have helped Malaysia attain and maintain an edge in infrastructure. Public investment levels in China seem exceptionally large, also considering the infrastructure improvements already achieved (Figure 2.11). By contrast, government investment has been relatively low in 2011–12 in Indonesia, the Philippines, and Sri Lanka despite significant infrastructure shortages. Furthermore, even execution of already budgeted investment projects

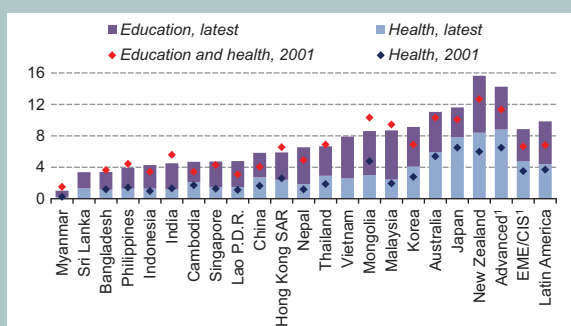
Figure 2.11

Public Investment and Infrastructure



Sources: IMF, World Economic Outlook database; and World Economic Forum.

Figure 2.12

Public Social Spending: Health and Education
 (In percent of GDP)


Sources: IMF, Government Finance Statistics database; World Economic Outlook database; World Bank, World Development Indicators database; and IMF staff calculations.

¹ Advanced economies excluding Asia. EME/CIS stands for Emerging Europe and Commonwealth of Independent States.

has been slow in some cases (e.g., Indonesia). In a number of economies, infrastructure spending and public-private partnerships activities outside of the general government budget are creating fiscal risks. In China, for instance, public investment is often financed through nontransparent local government financing vehicles which require close monitoring. In Malaysia, government contingent liabilities related to public-private partnerships and special purpose vehicles for financing infrastructure projects are on the rise. This underscores the need to strengthen the management of public expenditures and enhance budget reporting and overall fiscal transparency.

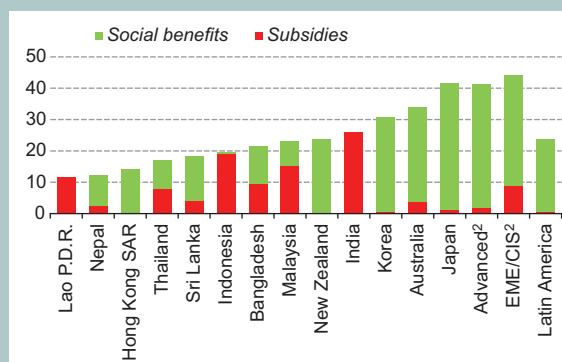
In spite of still relatively poor health conditions, low education levels, and the surge in per capita income of the past decade,⁹ government expenditure on health and education has barely increased in Asian EMEs and LICs (Figure 2.12). Furthermore, in most of these economies both government health and education expenditure remain smaller than in peers in other regions and advanced economies. Private health expenditure—a possible substitute for public spending—is also nearly 1 percentage point of GDP lower in Asian EMEs and LICs than in other EMEs (World Bank, 2012c).

⁹ See OECD (2012) and OECD and WHO (2012) for recent evidence on health and education in Asia.

Figure 2.13

Subsidies and Social Benefits¹

(In percent of total expenditure, 2011 or latest available)



Sources: IMF, Government Finance Statistics database; and World Economic Outlook database.

¹ Social benefits include current transfers such as sickness and invalidity benefits, family allowances, unemployment benefits. Subsidies are current transfers to enterprises.

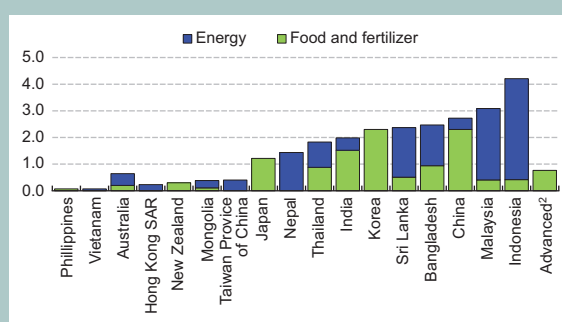
² Advanced economies excluding Asia. EME/CIS stands for Emerging Europe and Commonwealth of Independent States.

In several Asian EMEs and LICs, subsidies represent a larger share of total government expenditure than in peers in other regions, while the weight of social benefits (including for sickness, invalidity, and unemployment) is typically lower (Figure 2.13). Expenditure on food and, especially, energy subsidies continue to impose substantial budgetary costs in a number of Asian economies (Figure 2.14). For example, in Indonesia the direct

Figure 2.14

Food and Energy Subsidies¹

(Percent of GDP, 2012 or latest)



Sources: Country authorities; OECD (2012); and IMF staff estimates.

¹ For non-OECD economies refer to fiscal costs reported in the budget, including transfers to loss making energy producing companies. For OECD economies and China, food subsidies are from OECD and include also foregone revenues.

² Includes the United States, European Union, and Canada.

fiscal cost of oil and food subsidies, at more than 4 percent of GDP, is close to total government spending on health and education. Furthermore, the direct expenses reported in fiscal accounts do not even fully capture the total fiscal burden of subsidies. Foregone revenues due to preferential tax treatment of energy products can also be quite sizable. For instance, for India the total cost of energy subsidies is estimated to be 1.4 percent of GDP higher than that reported in the fiscal accounts after foregone revenues are factored in (Mohammad and others, forthcoming).

Energy subsidies create distortions and other economic costs, are damaging to the environment, and in practice, often benefit higher income groups more than the poor.¹⁰ Estimates for Indonesia, for example, suggest that about 45 percent of fuel subsidies benefit the richest 10 percent of households, who consume more fuel in absolute value (Agustina and others, 2008). The effectiveness of subsidy programs can also be compromised by implementation problems. For India, the largest food subsidy program (the Targeted Public Distribution System) is so weighed down by targeting errors, illegal diversions, and procurement inefficiencies that only an estimated 10 percent of outlays are directly transferred to the poor (Jha and Ramaswami, 2010).

How can subsidies, which are often used as social policy devices, be reduced, better targeted, or phased out? Lessons from subsidy reforms around the world and in Asia (e.g., the 2004–05 energy reform in the Philippines) suggest that key elements for success include setting up a comprehensive plan with clear objectives, an effective communication strategy to generate wide political and public support, and gradual implementation of pricing adjustments (IMF, 2013a).

Any reform to scale down food and energy subsidies would also need to include compensatory measures to alleviate the adverse impact of price increases on poor households, which could be

substantial. For example, according to some estimates, a \$0.25 per liter rise in fuel prices could reduce household real income by about 4 percent in Bangladesh and 3 percent in Sri Lanka (Arze del Granado, Coady, and Grillingham, 2012).

Cash transfers or vouchers targeted to the poor can compensate them for the loss of generalized subsidies while increasing efficiency. As such they can also contribute to overcoming social and political opposition to subsidy reforms. However, these programs need careful preparation and monitoring, requiring a considerable amount of data and administrative capacity. Identifying the most vulnerable households is particularly challenging. Indonesia, for example, set up a cash transfer program (*Bantuan Langsung Tunai*)—together with other compensatory measures—during its 2005 fuel reform. However, because of deficiencies in identifying potential beneficiaries, over half of poor and vulnerable households were not reached (World Bank, 2012b). India is planning to enhance its existing cash transfer program and identification system in connection with the ongoing subsidy reform (Box 2.1).

Conditional cash transfer (CCT) programs can also be effective instruments for assisting the poor. The programs transfer cash to households at the bottom of the income distribution, subject to conditions such as school attendance or use of health care facilities, with the double objective of alleviating poverty and addressing underinvestment in health and education. Large-scale CCT schemes are in place, for instance, in Latin America (e.g., *Bolsa Familia* in Brazil and *Oportunidades* in Mexico).¹¹ In 2007, the Philippines launched a CCT program that is becoming a cornerstone of its social protection system (Usui, 2011b). CCT programs have had positive effects on household consumption and poverty as well as on the use of education and health services by the poor in a number of countries (Fiszbein and Schady, 2009). Nevertheless, they are not appropriate for all poor households. For example, they cannot serve the

¹⁰ See IMF (2013a) for a comprehensive discussion of the economic costs of energy subsidies.

¹¹ For an overview of CCT schemes, see Fiszbein and Schady (2009).

Box 2.1**Cash Transfers in India**

India has initiated a wide-ranging project to shift many subsidy programs away from in-kind delivery toward direct cash transfers. Currently, India maintains large subsidy programs for food, fertilizer, and fuels. Subsidized food and kerosene are available from government-owned stores at below-market prices for eligible residents, while all fertilizer sales are at subsidized prices, and LPG cylinders are distributed directly, with a limit on each household's subsidized purchase.

In 2011, the Indian government asked a high-level commission to examine whether direct cash transfers could be used to replace subsidized sales of fuels and fertilizer. The commission's interim report pointed out that "a subsidy, by its very nature, introduces two or more prices for the same good, and creates incentives for pilferage and diversion. As a result, the underprivileged suffer the most. Ensuring that goods move in the supply chain at market prices can minimize the incentives for diversion."¹ Direct cash transfers, which entail direct payments from the government to recipients, can bring down costs and diversion by phasing out middlemen and complex bureaucracies. By mid-2012, the government established a pilot scheme replacing subsidized LPG with direct cash transfers in Mysore, Karnataka State, and presented plans to extend the program to another 51 (out of a total of 640) districts across India this year.

In January, the Indian government also began to replace its delivery system for pensions, scholarships, and wages under the national rural employment scheme with direct cash transfers. This shift is also being rolled out gradually, beginning in 43 districts, but with time would drastically simplify how the Indian government makes payments for national programs. Once such a large system is implemented, conditional cash transfers, which are already used on a small scale, could also be expanded.

India has also been rapidly expanding its biometric Uniform Identification system (*aadhaar*), which will establish an accurate and paperless means of identifying all Indians by 2014. This program will also present large opportunities for savings. A nationally uniform, biometric database would cut down on leakages from outdated biographical information, ghost identification, double registration, and other losses, which have been estimated in the range of 15–20 percent of total spending. Pilot programs delivering subsidized kerosene using *aadhaar*-based identification of eligible recipients have been set up in Rajasthan. However, given that kerosene is consumed by the poorest in the Indian population, replacing the current system on a broad basis will have to be done with care.

The integration of these two programs, *aadhaar* and direct cash transfers, promises further savings but will involve many challenges: the timeframe for bringing India's population of 1.2 billion into the *aadhaar* program could extend beyond 2014, and integrating this database with information on individuals eligible for subsidized fuel will take time. Shifting the fertilizer subsidy from companies to individual farmers and building up the capacity to deliver payments electronically could also be challenging in such a large country. But the total savings could be substantial: if the combination of direct cash transfer and *aadhaar* eliminates the estimated 15 percent leakage cited above for the programs being integrated, savings could total ½ percent of GDP in addition to the gains from the better targeting of spending on the poor.²

Note: The main author of this box is James Walsh.

¹ "Interim Report of the Task Force on Direct Transfer of Subsidies on Kerosene, LPG and Fertilizer," 2011 (June, p. 1), http://finmin.nic.in/reports/Interim_report_Task_Force_DTS.pdf.

² Chinoy (2013).

elderly or the childless, and they are not the most effective instruments to address temporary poverty, given the long-term commitment involved. Thus, in many countries, CCT and other transfer programs rightly coexist as complements. Moreover, the

effectiveness of CCT programs may be constrained by the quality of schools and health care facilities accessible to the beneficiaries, underscoring the need to associate CCT programs with reforms in the provision of education and health care.