

OECD AT 50

Evolving Paradigms in Economic Policy Making

Introduction

Progress in science is sometimes seen as a continuous increase in the set of accepted facts and theories. But, as shown by Kuhn (1962), periods of continuity are occasionally interrupted by the discovery of anomalies, which lead to a new paradigm, i.e. a new way of perceiving and analysing the subject of study. Even though the "dismal science" has never seen universal agreement on a single paradigm, a succession of paradigms can still be distinguished in the history of economic policymaking. Each paradigm defines "not only the goals of economic policy and the kind of instruments that can be used to attain them, but also the very nature of the problems they are meant to be addressing" (Hall, 1993, pp. 279).

A prominent paradigm shift took place in the early 1980s when policies became more oriented towards the medium term and the supply side took centre stage in response to the stagflation of the 1970s. Since then there have been further developments in the paradigm, such as those associated with the rational expectations revolution which called for predictability and transparency of policymaking. The "Great Moderation" of stable growth and prices since the mid-1990s was seen as evidence of the paradigm's success. However, favourable headline statistics masked growing underlying imbalances, and when these erupted with the financial crisis of 2008-09, established certainties again broke down and new approaches to policymaking came to the fore.

This 50th Anniversary Special Chapter of the OECD Economic Outlook takes stock of the paradigm shifts in economic policymaking that have occurred since the Organisation began its work, both prior to the financial crisis and during it, drawing on the OECD's key economic surveillance processes (see Box 1). The chapter looks backward and forward. How have political and economic realities shaped the dominant paradigm? How has the financial crisis led the Organisation to reassess the pre-crisis paradigm? What parts of the pre-crisis paradigm appear to have failed and what parts may be worth preserving?

Paradigms of the past¹

The 1960s and 1970 were dominated by the active use of "demand management" policies to keep unemployment low and prevent unsustainable current account imbalances. While initially successful, they failed to cope with, first, large exchange rate misalignments in the early-1970s and, second, "stagflation" in the wake of the first and second oil price shocks.

^{1.} The discussion of the 1960s, 1970s and 1980s in this section draws on the 50th Issue Special Chapter of OECD Economic Outlook, No. 50 (OECD, 1991).



Box 1. Key OECD platforms for economic policy assessment and co-ordination

At its start in 1961, the OECD launched the publication of periodic OECD Economic Surveys for each member country, subjecting the OECD's drafts to a full day of discussion before the Economic and Development Review Committee in the first systematic peer review process in any international institution. These pull together expertise not only in the OECD's Economics Department, but increasingly also in specialised Directorates and Committees of the OECD. For several years now there have been periodic *Surveys* covering major non-member countries, such as the "BRICs", Brazil, Russia, India, China, as well as Indonesia and South Africa. For a long time – most of the first three decades of the Organisation's existence – the *Surveys* centred on the shorter-term outlook for a country and the macroeconomic responses to the challenges posed by that outlook. But progressively structural policy issues (and their interaction with macroeconomic developments) gained prominence.

The Economic Policy Committee, a body of senior officials from finance/economics ministries and central banks provides policy guidance on macroeconomic and structural issues. In this context, the OECD Economic Outlook analyses the economic situation and prospects – with an eye to long-run sustainability – and the policy requirements to which they give rise. The OECD Economic Outlook first appeared six years after the Organisation started its activities, in 1967. The colophon in the first issue mentions that the OECD Economic Outlook "... will appear initially twice a year, in July and December". In fact it has remained a biannual publication, aside from a special issue in March 2009 to cover the exceptional circumstances at the height of the financial crisis in the winter of 2008-09. Since 2005 the annual Going for Growth publication has provided an overview of key recommendations for structural reforms in individual countries, along with a checklist on how countries have responded to them. OECD policy analysis and advice also feeds into the G20, the single-most important global platform for the co-ordination of economic and financial policies since the onset of the crisis.

In the 1980s the focus of policies shifted to the medium term. Structural policies to liberalise product and labour markets took centre stage, and were embedded in a system of rules-based policymaking in the 1990s. This proved largely successful, although financial crises became more frequent and virulent. In the 2000s emerging market economies gradually – but surely – gained weight in the global economy. Imbalances increased amid regulatory and policy complacency, which eventually led to the recent financial crisis.

Testing the limits of demand management (1960s and 1970s)

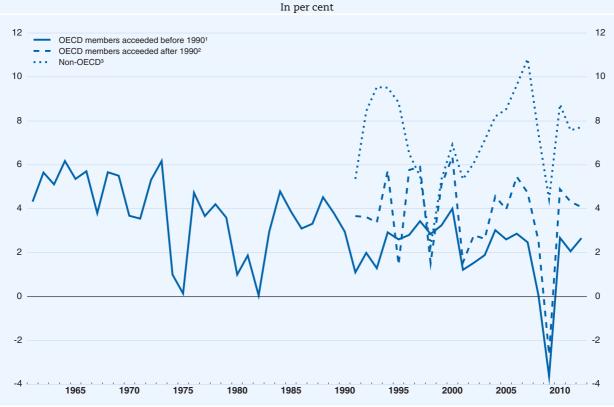
In the 1960s policy was conditioned by the Bretton Woods system of fixed exchange rates. Fiscal and monetary policy instruments were used to restore full employment, low inflation and external balances whenever developments diverged from these objectives. The paradigm appeared to work well. The 1960s were a period of rapid OECD growth (averaging over 5%, see Figure 1 and Table 1), stable inflation (3¼ per cent) and "full employment" – corresponding to OECD unemployment in the 3-3½ per cent range (Figure 3 below).

Still, in this period policy setting became increasingly preoccupied with rising external pressures in several countries and a series of international monetary crises that led to occasional exchange-rate re-adjustment. These pressures arose out of attempts to maintain fixed exchange rates at parities increasingly out of line with fundamentals in view of inflationary policies in the anchor country, the United States.

Events in 1971 marked the end of this period. Pressure from international capital flows led to a series of policy actions, including exchange-rate realignments and periods of floating – most notably of the US dollar from August onwards after its gold convertibility had been abandoned. The so-called



Figure 1. Economic growth



1. Refers to Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Japan, Luxembourg, Netherlands, New Zealand, Norway, Portugal, Spain, Sweden, Switzerland, Turkey, United Kingdom and United States. The weight in world and total OECD GDP equal, respectively, 60 and 89% in 2005 (calculated at purchasing power parity).

2. Refers to Chile, Czech Republic, Estonia, Hungary, Israel, Korea, Mexico, Poland, Slovak Republic, Slovenia. The weight in world and total OECD GDP equal, respectively, 7 and 11% in 2005 (calculated at purchasing power parity).

3. Refers to Enhanced Engagement countries (Brazil, China, India, Indonesia, South Africa and Russia). The weight in world GDP equal 23% in 2005 (calculated at purchasing power parity).

Source: OECD Economic Outlook 89 database.

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Smithsonian realignment in December 1971 brought little relief as exchange rate pressure continued and the Smithsonian parities broke down, with a generalised floating of exchange rates in early 1973. In 1979 the European Community launched the European Monetary System (EMS) of quasi-fixed exchange rates – the frontrunner of the single currency that was established in 1999.

In the 1970s, inflation became a wide-spread problem – even before the oil shocks hit. Overriding importance was attached to avoiding any "unnecessary" cost in terms of marked increases in unemployment in the battle against inflation. This was held to be possible if demand stimulus could be supported by incomes policies containing wage growth, although views of the effectiveness of incomes policies differed and sometimes fluctuated sharply. But when the first oil shock following the Yom Kippur War in late 1973 sent oil prices to unprecedented heights (Figure 5 below), OECD output sharply fell in 1975 while inflation soared to some 14%.

In the aftermath of the first oil shock policymakers were divided about how best to deal with a situation in which growth failed to recover to the pace desired while inflation remained stubbornly high (dubbed stagflation). One view was that, by careful management and the limiting of short-term growth ambitions it should be possible to achieve both satisfactory expansion and steady disinflation, as advocated by an OECD report prepared by eight leading economists (McCracken *et al.*, 1977). In a similar



Table 1. Summary statistics

Period averages

	1961-1972 ¹	1973-1981	1982-1991	1992-1998	1999-2007	2008-2012
Pool CDD growth						
Real GDP growth United States	4.2	2.9	3.0	3.6	2.8	1.2
	4.2 9.5	2.9 4.0	4.5	0.8	2.8	-0.5
Japan Euro area	9.5 5.1	4.0 2.8	4.5 2.6	1.8	2.2	-0.5
Total OECD	5.0	2.8	2.6	2.7	2.2	1.0
	5.0	3.1	3.1	2.1	2.1	1.0
Inflation ²						
United States	2.7	7.9	4.0	2.1	2.3	1.7
Japan	5.7	8.9	1.7	0.6	-0.8	-0.8
Euro area	4.0	10.3	5.5	2.8	2.0	1.6
Total OECD	3.7	10.9	7.9	5.1	2.7	1.9
Unemployment rate ³						
United States	4.9	6.7	7.0	5.8	5.0	8.3
Japan	1.2	1.9	2.5	3.1	4.7	4.7
Euro area	2.0	3.8	8.2	9.9	8.4	9.2
Total OECD	3.3	4.8	6.8	7.0	6.4	7.5
Current account balance ⁴						
United States	0.4	0.1	-1.9	-1.6	-4.7	-3.6
Japan	1.5	0.1	2.5	2.5	3.3	3.0
Euro area		-0.6	0.2	0.5	0.3	0.1
Total OECD	0.2	-0.5	-0.4	-0.1	-1.1	-0.8
Fiscal balance ⁴						
United States	-1.4	-2.2	-4.7	-3.0	-2.2	-9.5
Japan	1.0	-3.3	-0.9	-4.4	-6.0	-7.2
Euro area	-1.4	-3.4	-4.7	-4.7	-1.8	-4.3
Total OECD	-0.9	-3.0	-4.0	-3.8	-2.1	-6.3
Real short-term interest rate ⁵						
United States	3.1	2.2	4.8	2.8	1.5	-0.2
Japan		-0.5	4.5	1.2	1.0	1.1
Euro area		-0.4	4.7	3.9	1.2	0.4
Total OECD		-0.7	3.3	1.7	1.1	0.1

Note: OECD is defined as comprising all current members to the extent data are available. The dating of sub-periods corresponds to the following events: 1973: collapse of Bretton Woods; 1982: Reagan and Thatcher administrations in office in the United States and the United Kingdom, respectively; 1992: Maastricht Treaty and Single Market in Europe; 1999: Single Currency in Europe; 2008: onset of the financial crisis.

1. Or earliest period available for current account balance and real interest rates.

2. Private consumption deflator

3. Per cent of the labour force

4. Per cent of GDP

5. Three-month interest rate minus inflation

Source: OECD Economic Outlook 89 database.

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vein, the OECD Economic Outlook No. 22 (OECD, 1977) noted that further expansionary policy action would be necessary while avoiding a very sharp pick-up of activity and an associated acceleration of inflation.

OECD Economic Outlook No. 22 also argued that countries in strong balance-of-payments positions should take up slack faster than countries in a weak position. This view was contested by a number of countries, typically those identified as "best placed" to expand, such as West Germany and Japan. Questions were also raised about whether it was possible to secure durable expansion through fiscal policy; whether there was a stable, long-term trade-off between inflation and unemployment; whether disinflation could be achieved without monetary rigour; whether income policies were realistic except in very specific periods and (smaller) countries; and whether the public sector should seek to reduce the share of national resources it absorbed.



An uneasy consensus on a policy package was reached among the major seven (G7) countries at the Bonn Summit in 1978. Specifically, West Germany and Japan agreed to adopt fiscal stimulus measures in exchange for a commitment from the United States to raise its domestic oil price to world levels and the European commitment to reach a successful conclusion of the multilateral trade negotiations within the General Agreement on Tariffs and Trade (GATT).

But within a year of the implementation of the measures agreed at the Bonn Summit, OECD policymaking had to deal urgently with another large external shock: the sharp boost to inflation resulting from soaring oil prices in the wake of the Iranian revolution in 1979. In many countries, in combination with increased economic rigidities, the shock led to sharp rises in rates of structural unemployment, *i.e.* consistent with achieving and maintaining low inflation.²

Breaking the back of inflation (1980s)

The second oil shock brought to a head the debate about how to best get out of a situation in which inflation was rising while output was weak – and in which both had been affected adversely by a supply shock. This period saw the launch of structural reforms to make OECD economies more efficient, flexible and competitive – although modestly at first and with the United States and United Kingdom leading the way and Australia, Denmark, Ireland, the Netherlands and New Zealand soon following suit.

Monetary policy was geared to inflation control, for which limiting the growth of money supply initially was seen as crucial. Most OECD countries adopted or reinforced growth targets for monetary aggregates or – in Europe – continued to conduct their monetary policy so as to maintain exchange-rate parity between their currency and that of a country (i.e. Germany) that had been – and seemed likely to continue to be – successful in containing inflation. The result was an increase in real interest rates (Figure 2). Fiscal policy became mediumterm oriented, seeking to reduce or eliminate deficits and to stabilise or bring down debt-to-GDP ratios. The United States was an important exception, at least initially, as the Reagan administration pursued tax cuts while substantially raising expenditures for its Strategic Defence Initiative (commonly known as "Star Wars").

As policy regained a sense of direction in the course of the 1980s, private-sector confidence revived. This, together with the recovery of profits, the effects of financial market liberalisation and, in Europe, the prospect of the 1992 Single Market, underpinned a recovery of OECD economies. Employment increased at a pace not experienced on a durable basis for more than a decade, and the rate of unemployment followed a clear downward path (Figure 3).

Inflation did not decline as much as might have been hoped, in part because the monetary expansion to deal with the 1987 stock market crash was not reined in with sufficient firmness (Figure 2). As well, in many cases monetary policy was directed for too long towards exchange rate targets that turned out to be unsustainable. As had been predicted by the Mundell-Fleming model, it became more challenging to manage exchange rates as capital accounts were opened.³ The monetary policy framework also had to be amended towards direct inflation targeting because of the widespread breakdown of the links between monetary aggregates and national income and prices. This was due in part to the deregulation of domestic financial markets and the increase in global capital flows.

In the 1980s international economic co-ordination among OECD countries was initially limited but gained prominence later on. Reluctance to co-ordinate stemmed in part from the perception that the "concerted action" strategy agreed at the Bonn summit had failed. More generally, governments pursued a

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^{2.} See Blanchard and Wolfers (2000) for a seminal analysis of the interaction effect of adverse supply shocks and economic rigidities on unemployment in Europe.

^{3.} The Mundell-Fleming model, developed in the 1960s (Mundell, 1963, Fleming, 1962), predicted that if capital controls are removed a conflict between pegged exchange rates and monetary policy autonomy would result.



Real short-term interest rates Three-month interest rate minus inflation, in per cent 8 8 OECD members acceeded before 19901 OECD members acceeded after 1990² 6 6 Non-OECD³ 4 4 2 2 Λ n -2 -2 -4 - -6 -6 1965 1970 1975 1980 1985 1995 2000 2005 2010 1990 **Fiscal positions** Net lending of general government, in per cent of GDP 2 2 OECD members acceeded before 19901 Non-OECD³ OECD members acceeded after 1990² 0 0 -2 -2 _/ -6 -6 -8 -8 - -10 -10 -1965 2010 1970 1975 1980 1985 1990 1995 2000 2005 1. See footnote 1 of Figure 1. 2. See footnote 2 of Figure 1. 3. See footnote 3 of Figure 1.

Figure 2. Real short-term interest rates and fiscal positions

Source: OECD Economic Outlook 89 database.

StatLink ms http://dx.doi.org/10.1787/888932428918

hands-off approach to the international monetary system on the assumption that the "right" value for an exchange rate was determined in the market.

But massive current account imbalances (Figure 4) pointed to an overvalued US dollar exchange rate – in part due to the mix of fiscal expansion and tight monetary policy of the Reagan administration – and were feeding into disquieting protectionist measures. This eventually led to a more active approach to international co-operation, important manifestations being the Plaza (September 1985) and Louvre (February 1987) accords to re-align exchange rates through intervention in exchange markets and the co-ordination of monetary policies.⁴

^{4.} Other manifestations were the moves to deal with debt problems of lower-income countries and the decisive action to ensure that the October 1987 stock-market crisis did not provoke a global recession.



The adjustment burden of global imbalances initially tended to be borne by deficit countries alone. This was appropriate only insofar as a wide deficit reflected excess demand. However, after monetary policy was eased in response to the 1987 stock market crash, a financial and real estate bubble developed in Japan, which popped in the early 1990s. Similar developments were seen in the Nordic countries, as well as in the United States, culminating in the Savings and Loans and LTCM crises. Meanwhile, the analytical focus shifted to evaluating current account positions in the context of the balance between domestic saving and investment in each country.

The recovery ended in 1991 when large private-sector debt positions unwound and policy was tightened in an attempt to limit inflation (Figure 3). The recession hit the United States and Japan first, where the Savings and Loan Crisis and the collapse of the "Bubble Economy", respectively, took their toll. Activity in Europe was still buoyed by the boom in Germany associated with its reunification. But tight

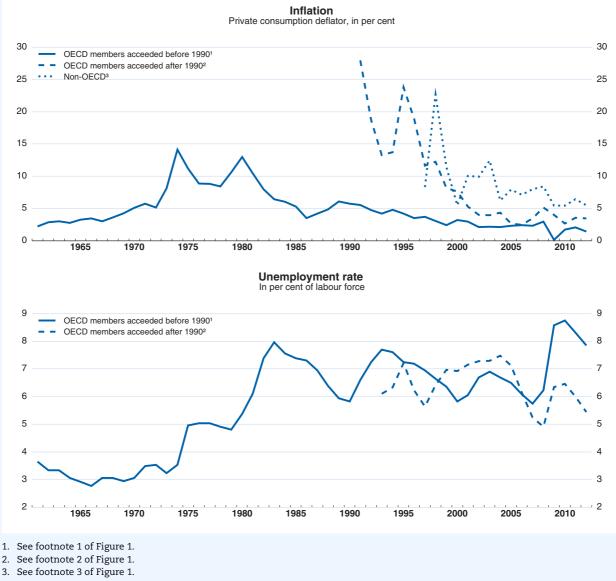


Figure 3. Inflation and unemployment rate

Source: OECD Economic Outlook 89 database.

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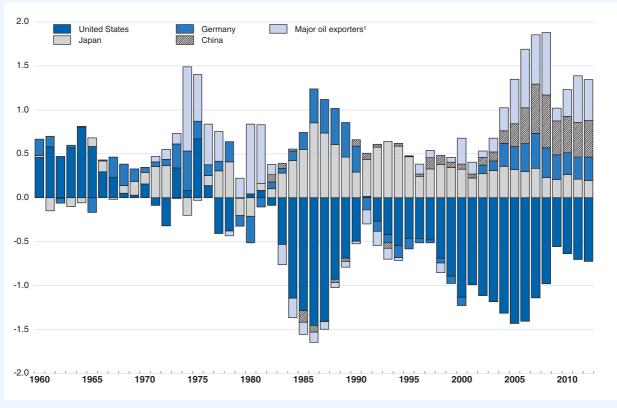


Figure 4. Global imbalances

Current account balance, in per cent of world GDP

1. Refers to Saudi Arabia before 1992.

Source: OECD Economic Outlook 89 database; OECD Economic Outlook 21 database; and IMF, International Financial Statistics.
StatLink mgs http://dx.doi.org/10.1787/888932428937

monetary policy in Germany to stem the boom led to exchange-rate turbulence within the EMS and eventually its breakdown, and pushed Europe into recession in 1993.

Structural reform amid rules-based macroeconomic policies (1990s)

A sobering assessment in the influential 1994 OECD Jobs Study (OECD, 1994) concluded that clearly not enough progress had been made on the fiscal front in the 1980s and that this was exposed once economic conditions worsened. The Jobs Study also reiterated the evident limits to the degree to which macroeconomic policy can be used to reduce unemployment. This was seen to require more emphasis on structural reforms, in particular greater wage flexibility, reductions in barriers to labour mobility and greater competition in product markets. Structural reform would also ease the speed limits to growth and reduce hysteresis effects.

A stability-oriented, predictable and credible macroeconomic policy was seen to assist microeconomic flexibility because private-sector participants could be more confident about mediumterm prospects and thus adjust more easily to changing circumstances. When macroeconomic conditions are sound, moreover, structural reforms may be pursued more actively because the transition costs may be less painful. This approach found inspiration in the rational expectations hypothesis, which predicts that markets will produce optimal outcomes if forward-looking agents can trust policy-makers to be "time consistent", i.e. not forced to renege on their commitments other than under exceptional circumstances resulting from major exogenous shocks.



The 1990s started on a weak note as all major OECD economies were in recession. Moreover, Japan entered its "lost decade" in the aftermath of the bubble economy, as balance-sheet repair of financial institutions was not taken on and deflation took root. Other main OECD economies fared better. The US economy recovered smartly, with growth on average exceeding 3% per annum, led by surging productivity growth attributed to the impact of rapid progress in information and communication technologies. Growth in Europe met headwinds as countries pursued fiscal and monetary austerity to qualify for monetary union, but this also meant that inflation finally came under control and public finances improved. Perhaps even more importantly, product markets were liberalised and labour markets reformed, although at different speeds across countries.

The 1990s saw greater regional economic integration. This included the establishment of the European Monetary Union with the Maastricht Treaty and the Single Market in Europe, both in 1992, and the North American Free Trade Agreement (NAFTA) signed by the governments of Canada, Mexico and the United States, creating a trilateral trading bloc in 1994. With the fall of the "Iron Curtain" in 1989, Eastern European economies entered the scene.⁵ This was also the period when the Asian "tigers" emerged, attracting massive capital flows from OECD economies. These economies overheated and saw bubbles inflating, which eventually led to the Asian crisis in 1997, followed by the Russian default in 1998 triggered by a fall in oil prices exacerbating domestic vulnerabilities.

Since the impact of the Asian and Russian crises on OECD economies had been limited, the OECD economy ended the decade on a strong note. It was buoyed by a bubble in stock markets due to the internet (or dotcom) hype. Meanwhile, monetary policy had remained relatively accommodative in response to the Asian and Russian crises and out of fears that the "millennium bug" would corrupt information technologies on which the economy had become more dependent – though it turned out to be a non-issue. Fiscal policy, notably in Europe, was too easy for the circumstances, but this was masked (and partly caused) by windfalls stemming from the sale of UMTS (access to third-generation mobile phone grids) licenses.

Emerging market economies entering the picture (2000s until the crisis)

Since the mid-1990s the world economy has become increasingly integrated, owing to the removal of trade barriers, the liberalisation of capital flows, the spread of new technologies and – last but not least – the fall of the Iron Curtain. World trade soared and cross-border flows grew from around 5% of world GDP in the mid-1990s to about 20% in 2007 – the year preceding the global financial and economic crisis. External assets and liabilities as a share of world GDP more than doubled over this period, from 150% to 350%.

The case of China, now the second-largest economy in the world, deserves a separate mention. China's accession to the World Trade Organisation (WTO) in 2001 represented a milestone in its engagement with the world economy. China has been running large current account surpluses since (Figure 4) while also attracting large inflows of foreign direct investment from the OECD area. Coupled with an exchange-rate policy of pegging the currency to the US dollar and strict capital controls on capital outflows, this led to the build-up of over \$3 trillion worth of foreign exchange reserves – almost 50% of GDP and one third of the global total. The bulk of China's official reserves have been invested in US Treasury bonds, allowing the United States to finance its large current account deficit at favourable terms and to keep its bond yields low.⁶

^{5.} Moreover, OECD membership, which had been stable at 24 since 1973, began to expand to include more countries in Asia, in Latin America and in Eastern Europe.

^{6.} More generally, excess saving in external surplus countries thus was seen to explain the interest rate "conundrum" of persistently low bond yields in deficit countries such as the United States (Bernanke, 2005, Bernanke *et al.*, 2011).



In addition, globalisation meant a massive increase in the global supply of low-skilled labour in the world economy which had substantial real-economy effects. Not only were emerging market economies now a major driver of global growth, they also kept inflation in the developed economies low, *via* growth in cheap export products, economies of scale associated with integrated supply chains and competition. Gradually this development was offset by the effect of buoyant demand on oil and commodity prices (Figure 5), but this was largely discounted as not being part of "core" inflation. In addition, in some OECD countries policy interest rates were systematically lower relative to the guidance offered by simple normative policy rules, such as the Taylor rule.⁷ In a context of malfunctioning financial markets (see below), this contributed to excessive risk taking and leveraging.

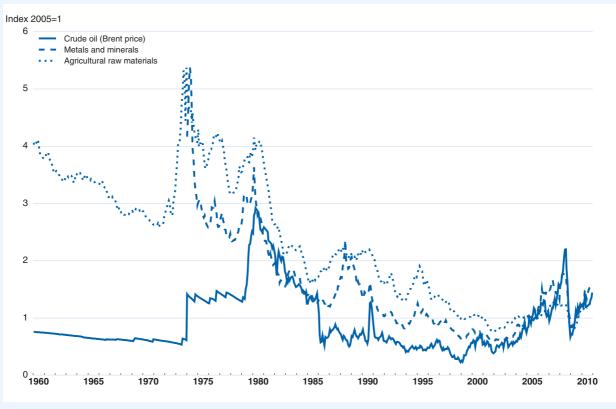


Figure 5. Real commodity prices¹

1. Deflated by private consumption deflator.

Source: OECD, Main Economic Indicators database; OECD, Quarterly National Accounts database; and OECD calculations.
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Indeed, the repetition of bubbles and busts from the late 1980s until the early 2000s, such as the Savings and Loans, LTCM, Asian and dotcom crises, had not only macroeconomic origins, but was also associated with, partly misguided, financial innovation. Technological change allowed the development of new and ever more complex financial products. Weaknesses in supervision and regulation led to a neglect of the associated risks, especially when new products were hard to value properly and banks and corporations removed them from their balance sheet to so-called "special purpose vehicles". Moreover, the mismatch between the generally longer maturity of portfolios and the short maturity of (abundant) money market loans risked leading to acute liquidity shortages if supply increases in money markets stalled.

7. See Pain et al. (2006), Ahrend et al. (2008) and Ahrend (2010).



With hindsight the dotcom bust in 2000-01 should have been taken as a warning signal that systemic risk was unduly increasing. But this shock was again comfortably absorbed by a substantial easing of monetary policy, in part also in response to the 11 September terrorist attacks in 2001. Housing and mortgage markets then took over from the stock market as a main attractor of liquidity in search for yield. In this context, real estate prices skyrocketed across a wide range of OECD countries, which produced large wealth effects on consumption and investment. Sustained growth ensued while inflation remained low. As risk appetites recovered and then reached new heights, prices in stock and bond markets also surged.

The prevailing paradigm largely survived the post-dotcom experience. A hallmark of this paradigm was a clear assignment of particular policy instruments to specific tasks. National macroeconomic policies, especially monetary policy, had become rules-based, forward-looking and stability-oriented, with the intention of becoming more predictable and helping to anchor expectations; structural policies were focused on improving longer-term growth prospects and the resilience to shocks. More specifically:

- Monetary policy was seen to be best conducted by an operationally independent central bank, with price
 stability as a key objective in practice typically defined as a low inflation rate of mostly around 2%. The
 main instrument used was the policy interest rate, accompanied by communication policies designed to
 ensure that policy actions became more predictable and better understood. Financial markets were
 viewed as efficient and forward-looking, allocating risks to those who could best bear them, so there
 would be no role for monetary policy to lean against asset price bubbles, even if these could be detected
 with any degree of confidence.
- The main objective of fiscal policy was seen to attain and maintain sound public finances by stabilising or reducing public debt and deficits, increasingly making use of rules or thresholds for deficits. The role of fiscal policy as a stabilisation tool was mostly limited to the functioning of automatic stabilisers. Discretionary fiscal policy was not regarded as the stabilisation tool of choice, partly because in normal times the costs easily outweigh the benefits.
- The main goal of structural policies was seen to foster long-term economic growth and improve labour market outcomes. In the 1990s a wide range of policies had been implemented to improve labour utilisation and labour productivity, including policies to improve human capital and innovation alongside the easing of product and labour market regulations (OECD, 2003 and 2006a). Attention was also paid to enhancing the resilience of economies, so as to allow them to bounce back more quickly from downturns, and the importance of competitive financial markets for promoting growth (OECD, 2006b).

Monetary policy appeared to be generally successful in this period, with low and stable inflation and generally well-anchored inflation expectations. But it was not sufficiently recognised that this outcome was helped by globalisation, a positive aggregate supply shock that kept inflation low – at least until oil and commodity prices surged.

Fiscal consolidation also looked successful, but – as has been a recurrent theme in the OECD's economic history – failure to attain sound underlying public finances was masked by very favourable cyclical developments. Fiscal rules (*e.g.* the European Stability and Growth Pact) failed to provide incentives to encourage the build-up of a sufficient reserve in good times. The implications of rising private-sector imbalances for the sustainability of public finances were ignored and forecasts of underlying public budgets were too optimistic. A possible correction in financial asset and real estate prices was not factored in and implicit fiscal liabilities were not taken into account.

While structural policies had been successful in several countries, there was little international coordination on policy choices, contributing to the persistence of cross-country imbalances in savings and investment and widening global imbalances (Figure 4). The excess saving in external surplus countries contributed to the interest rate "conundrum" of persistently low bond yields in deficit countries such as



the United States (Bernanke, 2005 and Bernanke *et al.*, 2011). Limited progress was also made in negotiations towards key international reforms, such as the WTO Doha round and climate change accords.

Finally, the potential for systemic financial risks was not effectively monitored, such risks being viewed as low as long as stability-oriented macroeconomic policies were pursued and micro-prudential regulation was conducted effectively. Policy decisions failed to incorporate the implications of the rapid pro-cyclical growth in financial leverage and risk-taking, the concentration of risk, and the increasing potential for the cross-border and cross-market transmission of economic and financial shocks. Efforts by the Bank of International Settlements to set up capital adequacy ratios in Basel I and then revising them in Basel II obscured the risks that were building up in banks' balance sheets.

All this explains how problems in a small corner of US financial markets (subprime mortgages accounted for only 3% of US financial assets) could infect the entire global banking system and set off an explosive spiral of falling asset prices and bank losses in 2008 and 2009. Consumer and investment demand quickly started to fall in the United States. As the US financial crisis intensified, weakness spread globally. With wholesale money markets freezing up, companies started to liquidate inventories and in late 2008 world trade nose-dived. The sharpest contraction since the Great Depression of the 1930s unfolded.

A crisis paradigm: getting around the liquidity trap⁸

The resolve of policymakers around the world, on display in particular at the London G20 summit in April 2009, contributed to prevent a second Great Depression. Massive fiscal and monetary policy stimulus was injected in most OECD and many non-OECD economies. As well, virtually all distressed systemically important financial institutions were rescued following the Lehman Brothers debacle, with central banks and governments providing ample liquidity and balance-sheet support. Many central banks resorted to non-conventional measures (large-scale intervention in capital markets so as to reduce the yields on longer maturities) alongside the provision of unlimited liquidity to the banking system.

While substantial increases in unemployment and public deficits were recorded, dramatic effects at the scale of the Great Depression have thus far been avoided. One lesson to be drawn from this episode is that the Keynesian recipe of active demand management has been appropriate under conditions of extreme financial stress and a threat of the economy heading to a liquidity trap. However, new challenges have emerged for policymaking, chief among which are the complications that arise when the effectiveness of each strand of policy is heavily affected by the stance of other policies and the need to act under extreme uncertainty.

Changing the assignment of policy instruments to targets

While macroeconomic expansion has been instrumental in containing the crisis, the depth of the recession and dysfunctional financial markets overwhelmed the capacity of traditional macroeconomic policy to inject sufficient stimulus. In addition to lowering policy interest rates to close to the zero lower bound and implementing traditional fiscal stimulus measures, many countries opted to use non-conventional policy measures to stimulate aggregate demand and give support to impaired banking systems in a synchronised fashion. Substantial efforts were made to support financial institutions including the provision of credit, funding guarantees and liquidity to the financial system, bank recapitalisation using public funds, deposit guarantee extensions and efforts to move troubled assets from banks' balance sheets to newly created asset management companies.

8. The final two sections of this chapter draw on Pain and Röhn (2011).



Such actions blurred the traditional dividing lines between fiscal, monetary, financial and structural policy, making the effectiveness of separate policy instruments increasingly dependent on others. For example, fiscal support for the financial sector had important ramifications for the transmission of monetary policy. As well, some central banks made large purchases of public debt, often without explicit guarantees against potential losses, while purchases of other assets affected resource allocation, thus blurring the assignments of fiscal and monetary policies. Equally, low policy interest rates and non-standard monetary policies reduced the need for public recapitalisation and for the supervisory authorities to resolve impaired institutions. And structural policies were used to provide support to non-financial enterprises and limit the social and labour-market consequences of the recession even if such settings were not appropriate for the long run.

Policymaking under extreme uncertainty

With time more information about the state of the economy has become available, but extensive uncertainties endure, including:

- Uncertainty about slack and potential output. Estimates of economic slack always vary markedly according to the indicator used and are subject to substantial revision over time, reducing the confidence that policy makers can place on any particular output gap measure.⁹ The crisis compounds that uncertainty because of the unknown extent to which it may have long-lasting effects on both the level and the rate of growth of potential output. Uncertainty about the output gap has clouded judgements about the extent of deflationary pressures and complicate monetary policy decisions. Uncertainty about the output gap also matters for fiscal policy as a smaller output gap implies that a larger proportion of existing fiscal deficits are structural rather than cyclical. However, with the currently high budget deficits in many OECD countries (Figure 2), even a large underestimation of potential output would not change the conclusion that significant consolidation is needed in the coming years.
- Uncertainty about the impact of monetary policy. When the crisis was acute uncertainty about the transmission of monetary stimulus was high as financial intermediation had become impaired. With policy rates near the zero bound, many central banks were forced to employ unconventional policy measures in order to support activity in capital markets and work round the impaired banking system, but there is limited knowledge about their effectiveness. With the exit from the crisis, monetary transmission has improved, but balance-sheet repair in the financial sector is far from complete and downside tail risks persist. This complicates the decisions about the timing of the exit from conventional and unconventional measures and their sequencing.¹⁰
- Uncertainty about the impact of fiscal policy. During the acute phase of the crisis fiscal policy was faced with difficult choices about the scale and fiscal cost of the discretionary stimulus and the emergency actions to support the financial system. During the exit phase uncertainty remains, including in estimating the likely effects of consolidation on the economy. Although the short-term effects are likely to be negative, these effects can vary significantly according to the state of the economy as well as the choice of fiscal instrument.¹¹

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^{9.} See Orphanides and van Norden (2002), Beck and Wieland (2008) and Koske and Pain (2008).

^{10.} Uncertainties also arise from difficulties in assessing the likely course of policy actions in other countries and the possible spill-overs from them. In general, stronger cross-border linkages mean that domestic monetary policy may need to react less.

^{11.} In principle, the short-term negative effect from consolidation could be smaller if policy interest rates can be lowered relative to earlier expectations and if the financial sector continues to recover as households are less credit constrained. In addition, households may reduce their savings if they perceive the fiscal consolidation as credible. If credible, the consolidation may also exert a favourable impact on the sovereign risk premium and thereby stimulate demand and ease the fiscal consolidation effort (OECD, 2010a, b).



The policy exit strategy

The exit from the crisis in the OECD economies will take several years. The policy challenges are to eliminate slack in the economy, restore an appropriate inflation level and establish sound public finances and resilient financial markets. This process needs to take place in a large number of countries simultaneously; hence international co-operation, including through the G20, will be essential in the face of cross-country spill-over effects. Moreover, policy in one domain will need to take into account policy setting in others.

The challenge for *monetary policy* will be to exit from exceptional stimulus without exacerbating fragilities in financial markets. In principle, and assuming inflation expectations stay anchored, the aim of monetary authorities should be to bring policy rates to their neutral levels by the time economic slack is eliminated. However, given the uncertainty about the output gap and potential discussed above, central banks may have to give more weight to survey measures of resource utilisation and inflation expectations and only move decisively towards neutral rates once these indicators suggest the economy is robustly on the mend. This strategy would by implication take into account the stance of fiscal policy as well as progress towards financial-sector repair to the extent they affect the outlook for inflation and activity.

During the exit period, monetary policy will also have to keep an eye on macro-prudential risk to the extent new macro-prudential regulatory bodies are not yet fully operational. Abundant liquidity provision at near-zero funding costs allows banks to roll over the debt of non-viable businesses or intensify the search for yield, ultimately producing costly misallocation of resources or a build-up of financial fragilities (BIS, 2010). Thus, barring a relapse into recession or deflation, central banks should move policy interest rates to levels that, while still accommodative, are clearly above zero. Meanwhile, unconventional policy measures may remain in place for some more time and could indeed facilitate the normalisation of conventional policy.

For fiscal policy, exiting from crisis measures and restoring sound public finances is likely to continue well into the medium term. The pace of the exit should be commensurate with the state of public finances, the ease of sovereign funding, the strength of the recovery and the scope for monetary policy offsets. It should also take into account that delays in fiscal consolidation might increase interest rates and future growth. A credible fiscal consolidation will likely improve financial market conditions and hence the monetary transmission mechanism.

Furthermore, fiscal consolidations in which expenditure reductions have a high weight are more likely to result in durable retrenchment (Guichard *et al.*, 2007) and more likely to be accommodated by monetary policy once it has departed from the zero-rate bound. Even so, tax increases look unavoidable in view of the size of the consolidation requirements. It is important that consolidation be growth-friendly. For example, raising the retirement age could bring long-term gains while having only limited effects on near-term growth. Priority should be given also to reducing the distortions created by subsidies and tax expenditures, and tax increases should be focused on the least distortive taxes such as on overall consumption and immovable property.

Since the onset of the crisis, attention has been given to identifying structural measures that could offer short-term support to aggregate demand as well as potential long-run benefits for economic growth and public budgets. However, sometimes there are tradeoffs between the two and a balance has to be struck. It is important to consider though that future benefits of growth-enhancing reform can have immediate positive effects as they allow monetary accommodation to continue for longer, bond yields to fall as the prospects of fiscal sustainability improve and private balance sheets to recover sooner. Structural reforms are especially urgent in labour markets to help countries make greater use of their available labour resources more quickly, to ensure that vulnerable groups remain attached to the labour market and to facilitate the reallocation of labour across sectors and regions.



Concerning the emerging market economies, monetary and fiscal stimulus injected during the global crisis should be withdrawn to damp rising inflation pressures and to prevent the development of bubbles in asset and real estate markets. They should not resist currency appreciation where a stronger exchange rate would be in line with the economic fundamentals and necessary to rebalance economic activity towards domestic absorption. Structural policies, including policies to shift activity from the informal to the formal sector of the economy and financial market reforms, should aim to enhance productivity and to achieve more inclusive growth.

A post-crisis paradigm

The repetition of financial crises since the early-1990s should have served as warnings that inadequate regulation and weak financial supervision can be risky in a globalised world economy and financial system. But policymakers took the overall benign economic development as evidence that the dominant paradigm worked and this eventually led to the 2008-09 financial crisis. In a globalised economy and financial system, financial vulnerabilities have increased. Booms and busts tend to be recurrent and so are the associated rescues of financial institutions and sovereigns. This, in turn, gives rise to concerns over moral hazard and the political acceptance – if not the legitimacy – of the policy paradigm.

Parts of the pre-crisis paradigm may remain valid after the crisis, including the orientation towards supply-side "structural" policies to achieve strong sustainable growth, the assignment of monetary policy to achieve price stability and the adoption of rules-based fiscal policy in the pursuit of sustainable public finances. However, in order to preserve and build on the wide-ranging benefits of globalisation, it is essential that the post-crisis paradigm be underpinned by safeguards to maintain financial stability and a strong commitment to sustainable, fair and "green" growth across the globe. All strands of economic policy – prudential, fiscal, structural and monetary – have a role to play, each within their remits and proper assignments. And all of them need to be co-ordinated internationally so as to achieve that policies reinforce, rather than work against, each other.

Stronger micro and macro-prudential policies

Micro-prudential regulation and supervision are needed to ensure that financial institutions have sufficient capital and liquidity buffers, relative to their risk exposure, to withstand adverse shocks. The Basel Committee has defined new required minimum levels of bank capital (and the transition period for achieving these standards).¹² This reform, if fully implemented, along with impending reform of liquidity requirements, should reduce the economic cost of financial crises.¹³ It could be usefully complemented by a maximum leverage ratio applicable to all assets so as to avoid regulatory arbitrage in favour of assets with low risk weights leading to over-stretched balance sheets. Moreover, ending the netting of derivatives positions in financial statements or more generally the possibility of keeping risks off-balance would help to better reveal the exposure to counterparty risk. It will also be important to deal with incentives problems embedded in remuneration systems and moral hazard for financial institutions that are too big or interconnected to fail.¹⁴ Finally, to avoid banks shifting risks to non-bank financial institutions, financial reform should encompass pension funds, insurance companies and various types of investment funds.

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^{12.} See BCBS (2010). Capital adequacy and liquidity are found to be among the most important crisis factors (Barrell et al., 2010).

^{13.} While tighter capital adequacy rules may act as a constraint on lending, their adverse impact on growth is found to be rather limited (Slovik and Cournède, 2011).

^{14.} Such institutions have an incentive to take excessive rise and benefit from a competitive edge in terms of funding costs and the collateral they can accept because of their *de facto* government backstop. This problem can be addressed by breaking up systemically important institutions, although this is challenging politically, or by imposing higher capital requirements.



Improved micro-prudential policies may not suffice. To ensure the stability of the financial system, macro-prudential policy instruments need to be developed to guard against the pro-cyclical build-up of financial imbalances in the economy (OECD, 2010a; Lawson *et al.*, 2009). Specific tools that could be employed include contingent add-ons to the micro-prudential buffers as a function of aggregate borrowers' leverage, and procedures for orderly resolution of cross-border financial institutions. Higher margin requirements, including limits to loan-to-value ratios in mortgage lending, could also be envisaged. In addition, stress tests of banks need to become more systemic, regular and harmonised across jurisdictions, and their results publicly available.¹⁵

Revisiting the monetary policy framework

The crisis has reopened the longstanding debate about whether monetary policy should lean against asset price bubbles or simply clean up after a bubble has burst. Before the crisis the dominant view was in favour of cleaning but not leaning, pointing to difficulties of indentifying bubbles in real time and concerns that leaning could un-anchor inflation expectations even if it was widely acknowledged that cleaning but not leaning might produce moral hazard and encourage excessive risk taking. However, the severity of the crisis has strengthened the case of those who argue for leaning against asset price bubbles, especially if these are accompanied by rapid credit growth.¹⁶ At the very least, monetary policy should guard against an unnecessarily lax policy stance fuelling asset price misalignments.

This does not mean that credit and asset prices should be included as a formal objective of monetary policy alongside inflation (and resource utilisation). Doing so risks blurring the assignment of policy instruments to targets, thus complicating the communication and accountability of monetary policy. If bubbles can be identified, macro-prudential regulation and supervision (see above) offer better targeted tools to prevent them. Nonetheless, it might be argued that it is necessary for central banks to adopt a sufficiently long horizon over which to achieve price stability – and this would imply a concomitant need to incorporate financial stability considerations in their policy decisions. To date only the European Central Bank has formally incorporated financial variables in its framework, although it is unclear to what extent this has effectively driven its monetary policy decisions.¹⁷

The crisis has also led to suggestions that inflation targets should be raised above the widely accepted 2% mark. It would provide room for monetary policy to react to large adverse shocks with less risk of hitting the zero-rate bound.¹⁸ It might also enhance wage flexibility and hence facilitate the absorption of large adverse shocks.¹⁹ However, there are also drawbacks attached to such a move, not least that central banks might lose some of their hard-won credibility.²⁰ A related suggestion is that monetary policy could target the price *level* rather than the inflation rate, notably at times of financial distress. In theory this could provide a stabilising mechanism as inflation expectations automatically increase (and hence real interest rates fall) if

^{15.} There are implementation difficulties in adopting such measures, including the choice of indicators to consider when setting these policy instruments. Another issue is whether policy measures should obey a simple rule, or whether more discretion should be allowed for (Yellen, 2010). It will also be important that macro-prudential bodies have a clear mandate and are accountable for it.

^{16.} See Blinder (2010a) and Stark (2010).

^{17.} The monetary pillar of the ECB's policy framework has been discussed extensively in the academic literature, see *inter alia* Svensson (2010a, b), Gerlach and Svensson (2003), Gerlach (2004), Beck and Wieland (2007) and Berger *et al.* (2010). On balance this literature is rather inconclusive as to the role of monetary aggregates in the policy framework.

^{18.} See Williams (2009) and Blanchard et al. (2010).

^{19.} See Summers (1991). It would also produce a one-time reduction in the real value of sovereign debt, but this advantage may well be offset by higher risk premiums on sovereign debt yields in the future.

^{20.} See Bean *et al.* (2010). Other drawbacks are that even small increases in trend inflation may compound distortions in the tax system (Feldstein, 1999), and that inflation above 2% could hardly be regarded as price stability as quality adjustments are increasingly incorporated in price estimates.



the price level was below target in a slump. But price-level targeting would be dangerous in the face of onetime hikes in indirect taxes or in commodity prices as the ensuing increase in real interest rates would exacerbate the shock.²¹ At any rate, no OECD country pursues a price-level target.

Unconventional monetary policy during the crisis was broadly successful in terms of improving the conditions in financial markets and stabilising the real economy, but it does give rise to a number of as yet unsettled issues.²² In particular, continued purchases of government debt by the monetary authorities may cast doubt on the independence of the central bank by suggesting that purchases are being made for fiscal reasons. Moreover, central bank interventions in private debt markets could create distortions. Quantitative easing also exposes the central banks balance sheet to market risk, including risks associated with sovereign bonds. The upshot is that in normal times, central banks should not aim to influence the shape of the yield curve other than through communication or conventional sterilised open market purchases of longer-dated securities. As well, impediments in monetary transmission due to distressed banks or solvency concerns about sovereign debt would best be tackled by addressing these problems at source.

Finally, an open question is to what extent macro-prudential and monetary policies need to be coordinated since macro-prudential policies will affect the monetary transmission mechanism (especially through the credit channel). Combining both types of policy in a single institution could facilitate such coordination, but having separate authorities – each with its area of responsibility and instruments – would offer greater accountability. If the latter set-up were to emerge as the preferred one, an explicit coordination mechanism between the two institutions would be needed to indentify the build-up of systemic risks and decide the best response to them.²³ There is a related issue about where responsibility for microprudential supervision would lie. Central banks are the lenders of last resort but in normal times should not be involved in the rescue of impaired financial institutions, which is the responsibility of the fiscal authorities. In the event of the failure of cross-border institutions, arrangements will need to be in place between governments for burden sharing.

Reforming fiscal frameworks

Substantial fiscal consolidation is required over the medium term in many countries and in several of them the fiscal challenges are exacerbated in the longer term by spending pressures related to health care, long-term care and pensions (see Chapter 4 in the current issue of the OECD Economic Outlook). In addition, future fiscal outcomes may be influenced by the implicit liabilities incurred in rescuing financial institutions. Furthermore, any future fiscal framework will have to take better account of saving-investment imbalances arising in the private sector associated with *e.g.* housing booms, as these have implications for the assessment of structural budget balances and the effectiveness of fiscal policy actions.²⁴

A change in the fiscal policy framework, including well-designed fiscal rules, can assist fiscal policy to become more sustainable, transparent, predictable and counter-cyclical. In particular, medium-term

- 23. In practice, both types of policy are likely to respond to aggregate demand shocks in a similar manner (easing), but this may not be the case for aggregate supply shocks. Moreover, as noted, if macro-prudential policies are underdeveloped, monetary policy may need to lean against the wind of the asset cycle (White, 2009). As well, if policy interest rates are at the zero bound, macro-prudential policies might have to place greater weight on their macroeconomic effects than would otherwise be the case (Yellen, 2010).
- 24. Recent work by the OECD shows possible ways to adjust the budget balances for asset-price cycles and to address other sources of uncertainty of the underlying fiscal position. Price and Dang (2011) compare the traditional and a new asset-price adjusted structural balance. In the run-up to the financial crisis the asset-adjusted deficit (as a share of GDP) was between 1½ and 2 percentage points higher than the tradition measure in several OECD countries.

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For the automatic stabilisation argument of price level targeting, see Eggertson and Woodford (2003), Ambler (2009) and Cournède and Moccero (2009). This mechanism would fail though if inflation expectations are adaptive rather forward looking (Murray, 2010). There are also many practical implementation and communication problems (Goodhart, 2005; Edey, 2008; Bean *et al.*, 2010), including the timing of the switch from inflation to price-level targeting (and back).
 See Paris and Disjuster (2000). Beam *et al.* (2010) and Plinder (2010).

^{22.} See Borio and Disyatat (2009), Bean et al. (2010) and Blinder (2010b).



expenditure rules, incorporating expenditure plans or ceilings to complement deficit or debt ceilings, offer a way of limiting boom-bust spending cycles and ensuring that unexpected revenues are saved rather than spent. Expenditure rules can help to build up reserves in cyclical upswings, to create room for the unfettered working of automatic fiscal stabilisers, and possibly discretionary stimulus, in a downturn.²⁵ Within this framework, decisions on individual spending categories should be made in line with efficiency considerations and other government objectives.

Fiscal rules need to be sufficiently binding in normal times and sufficiently flexible in exceptional times to be credible and effective. Establishing an independent fiscal council can be an important means of strengthening compliance with the fiscal rules, by raising the political cost of deviating from them. To be effective, a council needs to have an important role in the budget process, although government should keep the final fiscal responsibility. A key potential role for an independent council would be to advance independent and authoritative views in the pursuit of transparency of fiscal decision making. It must be supported by fully independent statistical agencies and auditing offices that record outlays and revenues using appropriate accounting principles.

In monetary unions, which share a single currency and monetary policy while maintaining separate national fiscal policies, an instrument to deal with sovereign debt stress needs to be in place. As well, fiscal governance can be strengthened through more intense market discipline by allowing for the possibility of orderly debt restructuring. If markets anticipate that countries with unsustainable fiscal positions would not be bailed out and private-sector losses would have to be incurred, they may price sovereign risk properly. To limit the risk of financial contagion, financial regulations should take into account the possibility of sovereign default in terms of capital requirements, haircuts on collateral for central bank operations and requiring appropriate diversification of risk. This also calls into question whether the zero-risk weighting given to sovereign debt under the Basel II and III frameworks is appropriate.

Pursuing bold structural reform

The risk of a permanent reduction in potential output and persistently high levels of unemployment due to the crisis underlines the central role for structural reforms. As discussed in Chapter 4 in the current issue of the *Economic Outlook*, structural policies should aim to facilitate a swift return to work so as to minimise this risk. Labour markets have done comparatively well in view of the magnitude of the recession, which can in part be attributed to earlier reforms. But the experience of crisis has yielded a number of new insights, including that temporary extensions of the duration of unemployment benefits and work sharing arrangements at times of distress can be effective, and that partial reform strategies that produce "dual labour markets", leaving some groups particularly vulnerable in bad times, are potentially damaging.

There are several ways in which growth-enhancing structural reforms can also contribute to fiscal consolidation. For example, increasing the retirement age can boost labour utilisation and demand while at the same time mitigating the budget pressures resulting from ageing societies. Furthermore, moving to best practices in the provision of health care and education can create room for consolidation without compromising service levels. Reforms that boost private-sector employment raise tax revenues; reforms can also reduce unemployment benefits and lower the public-sector wage bill relative to GDP.²⁶

^{25.} A general problem with fiscal rules, namely that they can encourage "gimmickry" such as one-off measures and creative accounting to circumvent them (Koen and Van den Noord, 2005), might be even more serious with an ambitious expenditure rule since this will bite more often (i.e. not only mostly in bad times but even also in good times) than a deficit rule. Part of the solution is to ensure the expenditure rule has a wide ambit to include all outlays (Price, 2010), applies to different levels of government and includes the monitoring of tax expenditures (Anderson and Minarik, 2006). A related risk with strict fiscal rules is that they may induce regulations to attain outcomes previously obtained by fiscal instruments.

^{26.} Calculations in OECD (2010b) suggest that a 1 percentage point improvement in the employment rate improve government balances by between 0.3-0.8% of GDP.



Product-market reforms that enhance productivity also have the potential to raise tax revenues, although they also tend to spill over in higher public-sector wages and transfers, thus offsetting some of this favourable fiscal effect.

Reforms to ease rigidities in labour and product markets remain needed to make economies more resilient to adverse shocks, either by damping their impact or by making their impact less persistent. In particular, reforms that remove gaps in employment protection between groups of workers, ensure sufficient flexibility in wage bargaining and weaken anti-competitive product-market regulations, could all enhance resilience, although potentially at the cost of a deeper initial impact from shocks. The implementation of micro and macro-prudential reforms could also help to improve resilience by securing the transmission of monetary policy and ensuring that financial intermediation continues to function even at times of crisis.

Finally, structural reforms have a key role in addressing the underlying determinants of global imbalances through their impact on consumption, saving and investment (OECD, 2011). Developing social welfare systems in China and other Asian economies would fulfil important social goals, and as a side-effect would reduce the need for precautionary saving, thus curbing the large current account surpluses of some of these countries. Product market reforms in services industries could encourage capital spending and thereby reduce current account surpluses in countries such as Japan and Germany. Removal of policy distortions that encourage consumption, such as tax deductibility of interest payments on mortgages, could help increase household saving and reduce the current account deficit in a number of countries, not least the United States. Financial market reforms could relax borrowing constraints in emerging economies and thereby boost consumption and investment and curb their current account surpluses, but should be accompanied by appropriate prudential controls.

International co-ordination and co-operation

Mechanisms need to be found to allow different policy settings to co-exist across the globe in a way that promotes economic stability and growth. This will require international co-operation, surveillance and communication in setting priorities and in minimising any potential adverse side-effects that can arise from the resulting geographical constellation of policies. One aspect of this is the international effort underway to strengthen prudential frameworks around the world. Beyond this, the role of the G20 *Framework for Strong Sustainable and Balanced Growth* is to identify a combination of macroeconomic, structural and exchange-rate policies that would strengthen growth prospects and helps to achieve more sustainable fiscal positions whilst minimising the risks of renewed widening in global imbalances.

Co-operation is also necessary if the international monetary system is to be strengthened. Eventually, real exchange rates will move in line with policy differences as well as different growth rates, inflation and fiscal positions. Specifically, over time it would be expected that emerging market economies would experience a real appreciation. If the nominal exchange rate is fixed, the required changes have to come through adjustments to wages and prices, which can be costly as it would risk de-anchoring inflation expectations. Persistent currency misalignments in the interim can generate unsustainable external imbalances. Hence reforms are needed to facilitate the movement of exchange rates in line with economic fundamentals so as to ensure that nominal exchange-rate adjustment acts as a safety valve. On the other hand, excessive exchange-rate volatility can also have its costs.

A factor to take into account is that large capital flows to emerging market economies in search for yield risk producing "Dutch disease", reckless risk-taking and sudden stops or reversals. To smoothly channel and absorb capital inflows, emerging market economies should aim to have the appropriate mix of macroeconomic policies in place (move towards sustainable fiscal policy where this is not yet the case and not resist appreciation of their exchange rate) and strengthen macro-prudential frameworks to further



contain the risk of financial instability. Capital restrictions should be a last resort and undertaken in a transparent manner and subject to international discussion. A framework for common principles underlying capital account policies could facilitate and enhance stability while guaranteeing open capital markets. Finally, the OECD has identified a possible role for structural policies to attenuate the financial stability risks associated with capital inflows – by influencing their composition towards more stable and productive forms of financing such as foreign direct investment (see Chapter 6 in the current issue of the OECD Economic Outlook).



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