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ECONOMICS DEPARTMENT POLICY NOTE No. 3



THE IMPACT OF STRUCTURAL REFORMS ON CURRENT ACCOUNT IMBALANCES





THE IMPACT OF STRUCTURAL REFORMS ON CURRENT ACCOUNT IMBALANCES

Global current account imbalances widened markedly in the years preceding the global economic crisis. Although the crisis brought some reversal to this trend, imbalances remain large in many countries. New empirical analysis by the OECD has examined the potential contribution of structural reforms to reducing current account imbalances.

The analysis shows that structural reforms aimed at boosting economic growth can have more or less persistent side effects on current accounts. These arise because structural policies influence saving and investment of households, firms and governments. In turn, the economy-wide gap between saving and investment equals the current account balance. Specifically, the following policy lessons emerge from the analysis:

- More developed social welfare systems would reduce the need for precautionary saving among households, which would moderate current account surpluses in external surplus countries.
- Pension reforms that increase the retirement age and thus the length of the working life would also
 reduce household saving and thereby reduce current account surpluses. Pension reforms that lead to
 cuts in replacement rates would have the opposite effect.
- Financial market reforms that raise the sophistication or depth of financial markets may relax borrowing constraints in emerging economies, thus contributing to a fall in the saving rate. The associated weakening of the current account position might be reinforced if the reforms also boost investment.
- Reforming competition-unfriendly product market regulation could encourage capital spending and thereby contribute to reduce imbalances in surplus countries.
- Some policy settings introduce distortions that encourage consumption, such as tax deductibility of
 interest payments on mortgages in the absence of taxation of imputed rent. Reform in this area might
 help increase household saving and thereby improve a country's current account position.

Overall, for the policies investigated, surplus countries appear to have more scope for structural reforms that would both enhance economic growth and reduce external imbalances. A scenario analysis indicates that if Japan, Germany and China were to liberalise their product markets and China also increased public health spending and continued to liberalise its financial markets, global imbalances could decline by around one-fifth relative to a baseline scenario. Moreover, since external deficit countries tend to have larger fiscal consolidation needs than surplus countries, fiscal tightening should also contribute to reduce external imbalances over the coming decade.

Some narrowing during the economic crisis notwithstanding, external imbalances remain wide

- 1. Global current account imbalances widened markedly in the years prior to the crisis (Figure 1). The United States was the main contributor on the deficit side and several of the fast-growing Asian and oil-producing countries as well as Japan and Germany were the main contributors on the surplus side. While the euro area's current account balance with the rest of the world was relatively small, several individual member countries recorded sizeable and growing deficits or surpluses. The economic crisis was accompanied by a substantial narrowing of external imbalances as well as by a change in their composition.
- 2. Since a country's current account balance equals the difference between domestic saving and investment, these developments were mirrored in changes in saving and investment patterns. In the OECD, tighter credit conditions, rising labour market uncertainty and efforts to make up for sudden wealth losses caused household saving rates to rise from their pre-crisis levels. However, this was generally more than offset by lower government saving, so that national saving rates fell. Since the fall in the national saving rate was, on average, smaller in external deficit countries, it contributed to a decline in external imbalances. At the same time, total investment rates fell substantially in many

countries, driven by falling business investment and, in those countries that had experienced house price and construction booms, falling residential investment. Since the fall in investment was generally larger in countries with current account deficits, these developments also contributed to a decline in global imbalances.

3. Going forward, by narrowing the gaps between public (and thereby national) saving and investment, fiscal tightening will contribute to a further reduction of external imbalances as the need for consolidating public finances is generally higher in external deficit countries. A baseline scenario shows that global imbalances would decline by about one-fifth if public debt-to-GDP ratios were stabilized by 2025 in all OECD countries. This is because external deficit countries are on average in greater need of fiscal consolidation than external surplus countries. Even so, global imbalances are expected to remain wide.

A. Current account balances at a global level, as % of world GDP

Germany

Japan

United States

China

Rest of world

1.0

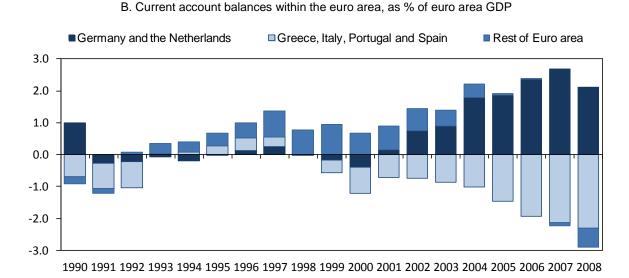
-1.0

-2.0

-3.0

Figure 1. Widening current account imbalances worldwide and in the euro area, 1990-2008

1990 1991 1992 1993 1994 1995 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008



Source: World Bank (2010), World Development Indicators Database.

4. One issue that has gained prominence in the international policy debate, not least in the G20 context, is whether structural reforms could help reduce such global imbalances. Structural policy reforms are typically implemented to promote economic growth, but they may indeed have side-effects on current account positions and thus contribute to a narrowing of external deficits or surpluses. These side-effects arise because structural reforms may influence the saving and investment decisions of households and firms as well as public saving and investment. In turn, changes in saving and investment patterns affect net external capital flows, real exchange rates and, ultimately, current accounts. For instance, a reform that lowers saving in an external surplus country will reduce net capital outflows, strengthen the real exchange rate and thereby weaken the surplus, all else equal.

Social welfare systems reduce the need for household saving

- 5. Households hold a certain amount of precautionary wealth as a cushion against unexpected adverse events such as unemployment, sickness or disability. Policy may influence the amount of precautionary wealth, and with it the level of precautionary saving, by affecting both the probability of adverse events and their expected severity:
 - A rise in public spending on health may reduce both the likelihood of diseases (*via* higher-quality preventive medicine) and the private cost of sickness (*via* better public insurance). OECD analysis shows that a higher GDP share of public health spending is associated with lower saving rates (Table 1). The effect is stronger at low initial levels of health spending. For example, a rise in public health spending in China by one percentage point of GDP (implemented in a way that does not affect the government's budget position) could reduce total saving by as much as 2½ percentage points of GDP according to these estimates.
 - Likewise, it might be expected that a higher level or a longer duration of unemployment benefits would reduce the need for precautionary saving to protect against unemployment. However, new OECD research could not find support for such a link, possibly because the effect is small.

Table 1. Overview of the estimated saving, investment and current account effects of structural reforms

Long-run impact. % of GDP¹

2019 1011 111 201, 70 01 021			
	Total saving rate	Total investment rate	Current account balance ⁴
Increase in public health spending by 1% of GDP	-1.9	-	-1.9
Financial market liberalisation (similar to average change across OECD over past decade) ^{2,3}	-1.3	0.6	-1.9
Increase in the statutory retirement age by 1 year	-0.5	-	-0.5
Product market liberalisation (similar to average change across OECD over past decade) ²	-	-0.4	0.4
Lowering of employment protection (similar to average change across OECD over past decade) ²	-	-0.1	0.1

Note: The effects refer to reforms that do not lead to changes in the government's budget balance. The effects are based on estimates for a sample of 30 OECD countries that do not take into account possible heterogeneity in the impact of reforms across countries.

- 1. As the investment impact of product market reforms vanishes after a few years, the table shows the change in the investment rate in the year following the reform.
- 2. The assumed reform corresponds to the average change in the level of respectively financial and product market regulation and employment protection in OECD countries between 1998 and 2008 (or the latest available year).
- 3. Measured by the change in the GDP share of credit to the private sector.
- 4. Sum of the saving and investment rate effects.

Source: Based on Kerdrain, C., I. Koske and I. Wanner (2010), "The Impact of Structural Policies on Saving, Investment and Current Accounts", OECD Economics Department Working Papers, No. 815.

- 6. Provision for retirement is another important saving motive. As a consequence, pension reforms generally affect individual households' saving rates by altering the size of pension income streams as well as their timing over the lifecycle:
 - Reforms that unexpectedly reduce pension benefits can be expected to raise the saving rates of the working-age population as households attempt to accumulate more wealth to offset the effect of lower future pensions on consumption in retirement. Empirical analysis suggests indeed that a cut in benefits is associated with higher private saving rates in the aftermath of the reform, especially by workers aged between 35 and 45.
 - Unexpected increases in the statutory retirement age should induce workers to save less as they have more years to accumulate pension wealth and fewer years to spend it. However, the effect on the total saving rate may be partially offset by a higher number of saving workers. Consistent with existing evidence, new OECD analysis shows that a rise in the statutory retirement age by one year lowers total and private saving by around ½ percentage point of GDP.

Labour market reforms affect both saving and investment

- 7. Labour market reforms may influence saving and investment rates and thus current accounts by changing the wage level or the risk and duration of unemployment:
 - A higher minimum wage or a higher bargaining power of unions should influence investment by raising the wage level and thus unit labour costs, but different effects run in opposite directions. This may be why OECD research cannot find much evidence that the investment rate is influenced by these factors. Similarly, there is no strong evidence that the saving behaviour of households is influenced by the level of the minimum wage or the bargaining power of unions.
 - The strength of employment protection legislation (EPL) could influence the saving behaviour of households through the amount of precautionary wealth they wish to hold as a protection against the risk of unemployment. On the one hand, weaker EPL may raise precautionary saving by increasing the likelihood of dismissal. On the other hand, it may reduce saving by increasing job turnover and thereby reducing the expected length of unemployment spells. New OECD research suggests that weaker EPL pushes up aggregate saving rates, but only in countries with very low or no unemployment benefits. This finding is consistent with the view that unemployment benefits provide an alternative insurance device to wealth holdings.
 - An increase in employment protection may influence investment by increasing hiring and firing costs. While higher costs may divert some investment activity to other countries with lower costs, it may also induce firms to substitute capital for labour. Consequently, the investment effect of an increase in employment protection is ambiguous a priori. New OECD analysis finds that less strict employment protection is associated with lower investment rates. The effect is small, however: a typical EPL reform reduces private and total investment only by around 0.1 percentage points of GDP.
 - With a decrease in EPL raising saving (at least in countries with low or no unemployment benefits) and reducing investment, less stringent job protection should overall strengthen a country's current account position.

Product market liberalisation boosts investment, at least temporarily

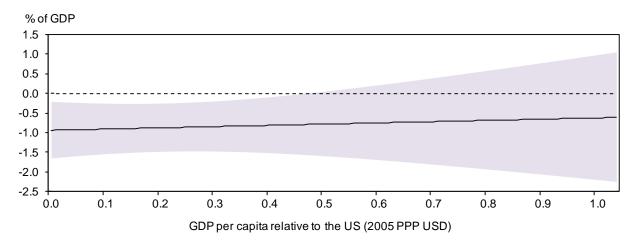
- 8. Product market reforms can influence firms' investment decisions in several conflicting ways:
 - Weaker entry barriers increase output and hence capital accumulation. Product market liberalisation may further boost investment (and saving) indirectly through higher productivity growth.
 - Since more competition reduces mark-ups and profits, product market liberalisation may
 depress investment. This is especially likely if profits have served as an internal source of
 funding and firms cannot easily replace them by external sources of funding, for example
 because of borrowing constraints. Product market reforms may also depress investment if
 accompanied by the privatization of public enterprises that had been overinvesting.
- 9. In practice, product market liberalisation, especially a removal of entry barriers, is found to be associated with higher investment. The estimates suggest that a weakening of regulation similar in size to that achieved in the average OECD country over 1998-2008 might raise total investment -- and thus weaken the current account, all else equal -- by about 0.4 percentage points of GDP in the year following the reform. However, this effect is temporary and gradually vanishes over time.

Financial market reforms may reduce saving and raise investment

- 10. Financial market reforms can influence the saving and investment behaviour of firms and households through a variety of different channels:
 - Reforms that increase the depth or sophistication of financial markets may reduce saving by giving more households and firms access to credit. At the same time, such reforms could raise saving by widening saving opportunities, enabling individuals to better tailor saving instruments to their preferences, risk aversion and income profiles. Finally, financial market reforms may influence saving indirectly by altering the level of interest rates or the rate of productivity growth, both of which are saving drivers. In practice, OECD analysis indicates that financial market liberalisation significantly reduces saving rates, but only in low-income countries (those with GDP per capita levels below half of the US level; Figure 2). A possible explanation is that the negative impact on saving of the removal of borrowing constraints dominates at early stages of financial development, whereas the positive effect from broader supply of financial instruments becomes more important at later stages.
 - Financial market liberalisation should stimulate investment by reducing credit constraints as well as by lowering the cost of acquiring and evaluating information on prospective projects and by reducing the risk of resource mismanagement through easier monitoring. However, financial repression is sometimes associated with households supplying cheap capital to enterprises, and in such cases liberalisation may raise capital costs and thus lower investment. In practice, empirical evidence, including new OECD research, shows that financial development raises the investment rate.
 - Overall, considering both the potential investment and saving effects of financial reforms, financial liberalisation seems to weaken current account positions. This effect appears to be greater in the presence of a strong legal system that raises transparency and predictability, consistent with the view that a stronger legal system may boost net capital inflows which are equal to the gap between domestic national investment and saving.

Figure 2. The saving rate response to financial market liberalisation is larger in less developed countries

Saving rate response to a "typical" financial market reform



Note: Financial market reform is measured by the change in the financial reform index (Abiad *et al.*, 2010). This ranges from 0 to 21, with 0 being the least and 21 being the most liberal financial system. The figure shows the total saving rate response to a change in the financial reform index by 1.86, which corresponds to the average change in the index in OECD countries between 1995 and 2005. For example, for a country with GDP per capita equal to one-fifth of the US level, such a typical financial market reform would reduce the aggregate saving rate by about 0.9% of GDP. The shaded area indicates the 90% statistical confidence interval around the estimated effect. It shows that the effect is significant only for countries with a GDP per capita level below half of the US level.

Source: Based on Kerdrain, C., I. Koske and I. Wanner (2010), "The Impact of Structural Policies on Saving, Investment and Current Accounts", OECD Economics Department Working Papers, No. 815; Abiad, A., E. Detragiache and T. Tressel (2010), "A New Database of Financial Reforms", IMF Working Paper, No. 08/266, International Monetary Fund.

Tax reforms affect saving and investment rates in several different ways

- 11. Tax reforms may affect saving and investment rates by influencing the level of after-tax income/profits, the after-tax rate of return, or the asymmetry between the tax treatment of different types of capital income, with ambiguous and usually weak effects on current accounts:
 - To the extent that tax reforms alter the after-tax rate of return on saving (e.g. by cutting tax deduction of interest expenses), they should affect the level of saving, with the direction of the impact depending on the relative strength of several offsetting factors.
 - A more progressive tax system may lower the aggregate saving rate by disproportionately reducing the income of higher-income households, who tend to have a higher propensity to save. However, new OECD analysis could not find robust evidence for such an effect.
 - Tax-deferred retirement saving vehicles may affect the allocation, but do not in general boost the level of private saving: most recent studies on the issue point to sizeable crowding-out. As for pension-unrelated savings accounts, OECD evidence shows that tax-preferred accounts create new savings only when moderate-income households participate in them. Furthermore, whether any such new private saving more than offsets the public dis-saving associated with the tax break is unclear.
 - A number of sector and firm-level studies show that corporate tax cuts or increases in depreciation allowances boost investment by reducing the cost of capital.

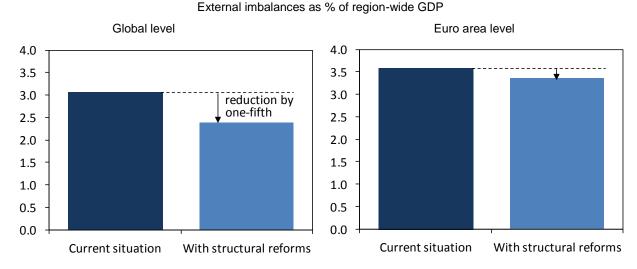
Selected structural reforms may reduce global imbalances by around one-fifth

12. The new OECD empirical analysis summed up in this note is used to obtain illustrative estimates of the effects of policy reform packages on current account imbalances. The reforms are chosen so as to both improve domestic growth prospects and help reduce current account positions in major deficit and surplus countries. The analysis is applied at two levels: global (OECD countries plus China) and within the euro area (OECD countries that are members of the euro area). Due to the need for substantial fiscal tightening across all OECD countries, the current account effects of structural reforms are calculated relative to a baseline scenario that assumes all OECD countries to adjust their budget so as to stabilise their public debt-to-GDP ratios by 2025. That baseline scenario already delivers a reduction in global current account imbalances by about one-fifth compared with their current level, as external deficit countries are generally in greater need for fiscal consolidation.

13. The following key findings emerge from the scenario analysis:

- If Japan and Germany aligned their level of product market regulation with OECD best practice, and China implemented product market reforms similar in size to those that happened in OECD countries between 1998 and 2008, continued to liberalise its financial markets as it did over the decade 1995-2005 and increased public health expenditure by 2 percentage points of GDP, global imbalances would narrow by about one-fifth, compared to a baseline scenario that only considers future fiscal tightening (Figure 3).
- Product market reforms in Germany and labour market reforms in Greece, Portugal and Spain that would align these countries' policy settings with OECD best practice would contribute to reducing intra-euro-area imbalances. The effect would be particularly large in the three smaller reform countries.

Figure 3. Structural reforms can help to reduce external imbalances



Note: The size of imbalances is measured as the sum of the absolute saving-investment-gap-to-GDP ratios of all countries in the region, weighted by 2009 GDP (in current USD). The current extent of imbalances (current situation) is calculated based on the current-account-to-GDP ratios in 2009. The impact of structural reform shown here would materialise after 15 years and is calculated relative to a baseline scenario that assumes all OECD countries to adjust their budget so as to stabilise the debt-to-GDP ratio by 2025.

Source: Based on Kerdrain, C., I. Koske and I. Wanner (2010), "The Impact of Structural Policies on Saving, Investment and Current Accounts", OECD Economics Department Working Papers, No. 815.

Suggested further reading

The main papers providing the background to this note are:

- Kerdrain, C., Koske, I. and I. Wanner (2010), "The Impact of Structural Policies on Saving, Investment and Current Accounts", *OECD Economics Department Working Papers*, No. 815.
- Fournier, J.-M. and I. Koske (2010), "A Simple Model of the Relationship between Productivity, Saving and the Current Account", *OECD Economics Department Working Paper*, No. 816.
- Additional related papers include:
- Alesina, A., S. Ardagna, G. Nicoletti, and F. Schiantarelli (2005), "Regulation and Investment", *Journal of the European Economic Association*, Vol. 3, pp. 1-35.
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