

CHAPTER 3

CORPORATE SAVING AND INVESTMENT: RECENT TRENDS AND PROSPECTS

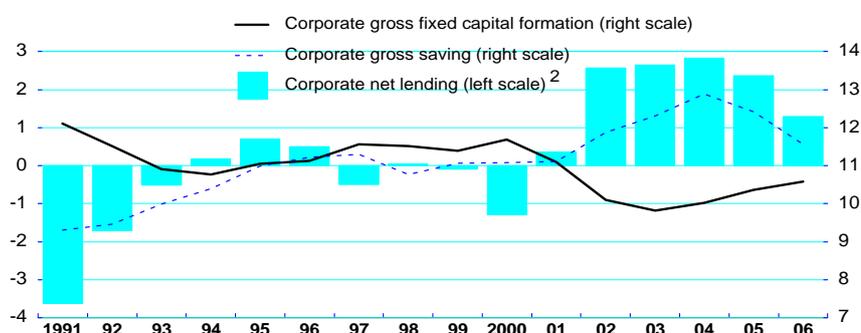
Introduction and summary of the main results

Since 2001, OECD corporate net lending has risen sharply

For the aggregate OECD corporate sector, the excess of gross saving over fixed investment (*i.e.* net lending) has been unusually large since 2002, even allowing for the recent fall (Figure 3.1). Indeed, while attention has increasingly focussed on the emergence of global financial imbalances and a possible global “saving glut”,¹ aggregate OECD corporate net lending rose slightly more over 2001-05 than the aggregate external surplus of the

Figure 3.1. OECD corporate net lending¹

As a percentage of GDP, in current dollars



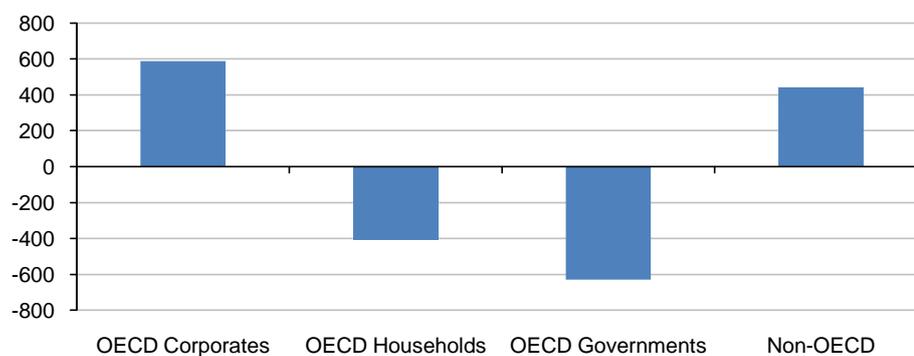
1. Aggregates include Australia, Canada, Denmark, Finland, France, Germany, Italy, Japan, Netherlands, United Kingdom and United States. For Japan and Denmark in 2006, estimates based on Economic Outlook 82 database.
2. Net lending is not equal to the difference between gross saving and gross fixed capital formation. It is also affected by changes in inventories and capital transfers. These can be important, as for Germany in 1995 and Japan in 1998.

Source: OECD Annual National Accounts, national sources and OECD calculations.

1. See Bernanke (2005).

emerging market economies (2% of OECD GDP against 1½ per cent of OECD GDP) (Figure 3.2).² To the extent the household sector does not fully “pierce the corporate veil”, the rise in corporate saving that has driven the run-up in net lending will have contributed to low global interest rates.³

Figure 3.2. Change in net lending: a global perspective
Variation between 2001 and 2005 in billions of dollars



Source: OECD Economic Outlook 82 database and OECD Annual National Accounts.

A rough and ready decomposition suggests...

Against this background this chapter examines various facets of corporate net lending with a view to understanding some of the main forces at play behind the recent run-up and providing some insight into whether and how they might possibly unwind in the future, a process that may already be underway. To this end, it attempts to identify cyclical, other transitory and trend influences on corporate net lending, distinguishing, in successive sections, between those phenomena which appear common across most OECD countries, and those which appear more country-specific. An attempt is made to keep a crude running score-card of these transitory and more long lasting contributions (Table 3.1). The focus of the chapter is on the seven major economies, which have made a large contribution to the increase in total OECD corporate net lending, but other country experiences are also mentioned. China, where corporate net lending has also increased sharply over the recent past is covered separately in Box 3.1. The main findings of the chapter are:

... that the increase is partly temporary...

- No more than half of the increase in corporate net lending over the period 2001 to 2005 is likely to be persistent (Table 3.1).

2 . Detailed information on corporate accounts is not yet available for 2006 for some countries, notably Japan. In most other cases it became available only recently and could not be used for the econometric analysis. Therefore this chapter focuses on the 2001-2005 period, notably as concerns OECD aggregates. Where available, the data for 2006 is included in individual country charts.

3 . To the extent rising corporate saving has been a driver of the fall in household savings rates, and provided high corporate saving is expected to persist, this would provide greater confidence in the sustainability of what otherwise appear to be unusually low household saving rates in many OECD countries.

... with some of it likely to fade with the cycle and...

- A factor contributing to the recent buoyancy in net lending has been the simultaneous pick-up across both financial and non-financial sectors in many countries, whereas in the past such movements have typically been poorly correlated. High net lending in the non-financial sector has been partly driven by the cyclical downturn since 2001; with output gaps continuing to close after 2005 this transitory effect is fading.

Table 3.1. **Contributions to increase OECD corporate net lending over period 2001-05**

Percentage points of GDP

	Magnitude of effect (% of OECD GDP)	Transitory or long-lasting effect
TOTAL	2.0	
Contribution by country		
United States	0.6	Some partial reversal likely
Japan	0.8	Unclear, more likely to fall
Germany	0.3	Likely to persist
United Kingdom	0.4	Some partial reversal likely
Others	-0.1	
Contribution by macroeconomic effects¹		
Effect of business cycle	0.5	Transitory
Effect of financial variables	0.6	Probably mostly transitory
Contribution by sector to operating surplus		
Contribution of financial sector	0.4	Probably mostly transitory
Contribution of housing-related sector ²	0.3	Probably mostly transitory
Total operating surplus	1.1	
Contribution by accounting concept		
Effects through higher corporate saving		
Effect of lower interest payments	0.8	Some partial reversal likely
Effect of increased property income	0.7	Probably long-lasting
Effect of lower inflation	0.1	Long-lasting
Total from higher corporate gross saving	1.2	
Effects through lower corporate investment		
Lower investment goods relative prices	0.5	Possibly permanent
Total through lower corporate investment	0.9	

Notes: The results are derived from different analyses, which are not mutually exclusive. This means the individual effects cannot be meaningfully summed.

1. For details, see André *et al.* (2007).

2. The contribution of the construction sector and real estates services, including imputed rent.

Source: OECD calculations

... the ongoing adjustments in the financial...

- Movements in financial sector net lending appear to be better explained by financial variables such as broad money growth and real house prices, rather than by the business cycle. The financial sector, in terms of its value added in the economy, has contributed disproportionately to the increase in net lending (about ½ per cent of OECD GDP over the period 2001-05). This positive contribution to aggregate net lending is likely to be lowered substantially both because it was based on unusual financial buoyancy and because financial turmoil negatively affects profits of financial institutions.

Box 3.1. Corporate saving and investment in China

Since the early 2000s, profits of the corporate sector in China have risen markedly. Survey data show that companies in the industrial, retail, wholesale and construction sectors have seen their after-tax profits rise by about 6% of GDP between 2003 and 2006 (see Table).¹ Profits have also been increasing rapidly in the banking and telecommunication sectors. Most of the gains in corporate profits have translated into an increase in retained earnings (gross saving), as dividend payout ratios are extremely low for the corporate sector as a whole.²

Selected indicators of saving and investment in the Chinese economy

Percentage of GDP

	2003	2004	2005	2006	Change from 2003 to 2006
Corporate profits (selected sectors)	6.8	8.5	9.4	12.6	5.8
General government net lending	-0.9	0	0.2	1.1	2
Gross fixed capital formation	39.2	40.6	41.5	42.7	3.5
Current account surplus	2.8	3.6	7.2	9.5	6.7

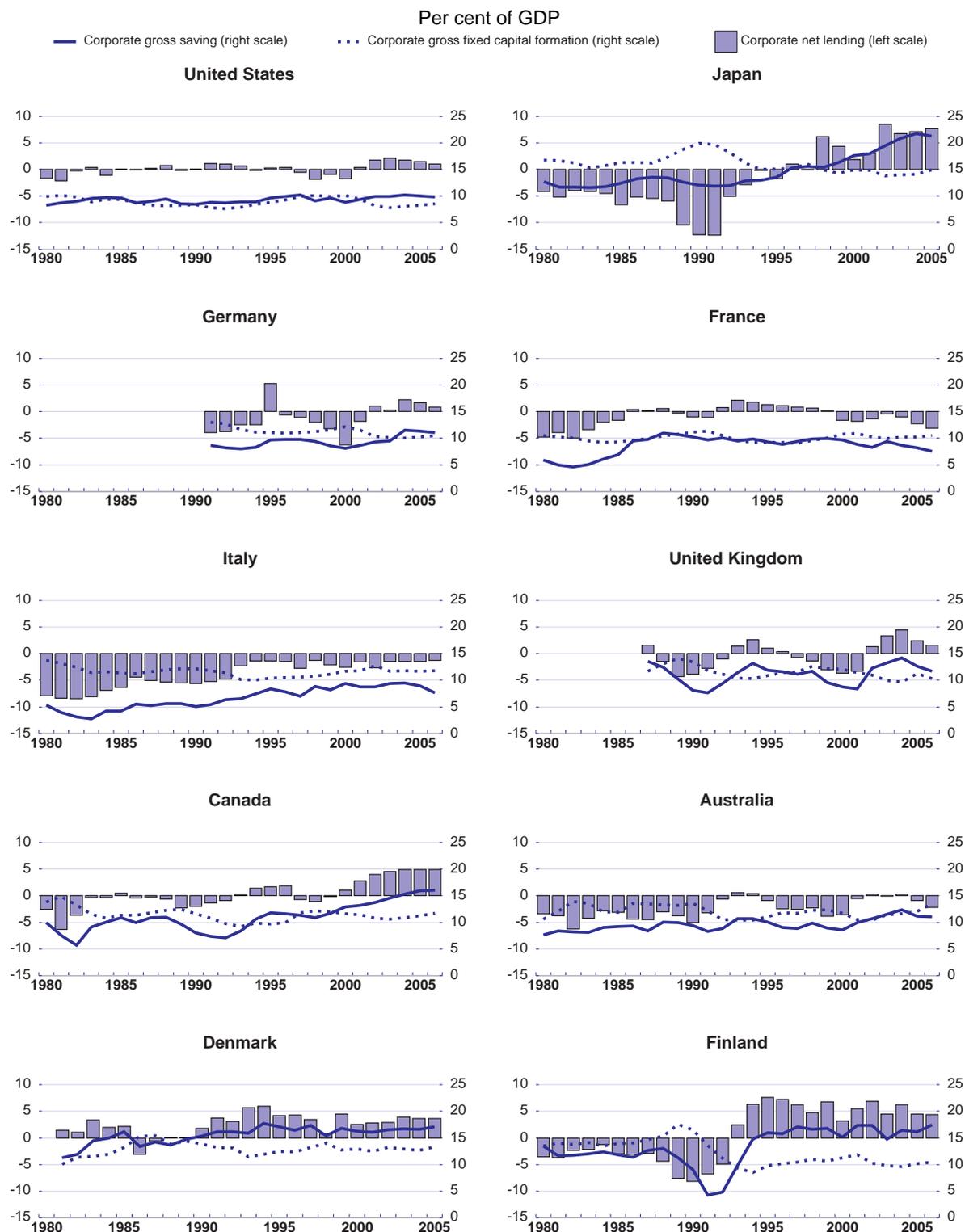
Source: National Bureau of Statistics, State Administration of Foreign Exchange, CIEC, OECD calculations.

Outside the corporate sector, net lending by the general government sector rose by 2% of GDP between 2003 and 2006, with estimates suggesting that gross government saving increased only modestly more.³ Household saving rates are high, at 32% of disposable income (according to survey data) and a bit less than 17% of GDP, and appear to have increased only modestly between 2003 and 2006. National accounts data suggest that investment increased by 3½ per cent of GDP between 2003 and 2006.⁴ With saving rising more than investment, the current account balance rose from 2¼ per cent of GDP in 2003 to an estimated level of 9½ per cent of GDP in 2006. There are indications that in 2007 corporate profits have continued to soar and to drive national saving and the current account surplus.

1. The currently published official sectoral accounts stop in 2003 and do not appear to take into account the large revision made to GDP as the result of the Economic Census. An attempt at updating the sectoral income and expenditure balances was made by Barnett and Brooks (2006).
2. Just over half of listed companies pay no dividends and dividends paid by state-controlled listed companies accrue to holding companies which, in turn, pay no dividend to their ultimate shareholder, national or local governments.
3. The government revenue and spending statements do not present figures for government fixed capital investment or capital transfers and so do not permit the calculation of saving. As a benchmark calculation, total government spending rose by 0.9% of GDP between 2003 and 2006 and if the share of investment and capital transfers remained stable at around one third of total spending, public investment would have increased by about 0.3% of GDP.
4. Estimated as a residual, saving by households seems to have increased at most by 2% of GDP between 2003 and 2006 (where the residual = gross investment + current account - gross saving of the corporate sector - gross saving of the government sector). This residual includes, however, not only household saving but also unmeasured corporate profits, mis-measurement of investment and differences between the income and expenditure measures of GDP.

- ... and housing sectors*
- Construction, real estate and housing sectors have also added significantly to the increase in corporate net lending in many countries (in aggregate about 0.3% of OECD GDP). Also this effect is likely to dissipate in the future as the housing correction continues in the United States and housing booms come to an end elsewhere.
- Higher saving and lower investment contributed to the increase*
- Rising corporate net lending as a share of GDP reflected both falling corporate investment and increasing corporate saving shares. An important part of the recent apparent weakness in corporate investment relative to GDP can be explained by the current business cycle. Other possible explanatory factors, which appear to be more structural in nature, and therefore more long-lasting, include: the ongoing decline in the relative price of capital goods; in some countries, lower trend growth and depreciation rates; and net foreign investment (FDI) abroad, which appears to have increased since 2000. Corporate saving was mainly driven by increasing profit shares in most countries, possibly related to a degree of wage moderation, and lower interest charges. Dividends generally did not rise in line with profits, and in some cases fell relative to profits. In a few countries, corporate profits were channelled to shareholders *via* share buybacks. Looking forward, the factors described above as mostly transient are likely to fade, but other structural factors behind higher net lending, such as a degree of wage moderation, may persist for some time.
- Cross-country differences have reflected...*
- Although corporate net lending rose over this period in the large majority of countries, variation was considerable (Figure 3.3). Japan, Germany and the United Kingdom experienced above average increases in corporate net lending, while in France and Italy, corporate net lending has not risen at all.
 - In the case of Japan, the increase represents a continuation of trend recovery in corporate balance sheets from the financial crisis of the early 1990s which has been further boosted by sustained gains in competitiveness.
 - For Germany, on the one hand, and France and Italy, on the other, an important factor behind the development in corporate net lending has been, respectively, sustained improvement or deterioration in competitiveness that has affected profitability.
 - The increase in corporate net lending has been particularly strong in the UK financial sector, in relation with the United Kingdom's importance as an international financial centre.
- ... competitiveness in Japan...*
- ... as well as in continental Europe...*
- ... while in the United Kingdom, the financial sector played a large role*

Figure 3.3. Net lending of corporations



1. Net lending is not equal to the difference between gross saving and GFCF. It is also affected by changes in inventories and capital transfers. These can be important, as for Germany in 1995 and in Japan in 1998.

Source: OECD Annual National Accounts and national sources.

The forces behind the increase in aggregate OECD corporate net lending

Assessing the influence of output and financial cycles

The activity cycle accounts for ¼ of increased net lending

Corporate net lending has been historically high since 2002 as a result of cyclical, other transitory and trend influences. As regards the influence of the cycle, coefficient estimates from panel regressions suggest that a decrease in the output gap (*i.e.* more slack) by 1 percentage point is associated with an increase in corporate net lending by ½ per cent of GDP. On this basis, up to one quarter of the overall increase in aggregate OECD corporate net lending of 2 percentage points of GDP between 2001, the year after the cyclical peak for the OECD as a whole, and 2005, when output had still not fully recovered, might be attributed to the influence of the cycle.⁴

Another fifth is due to financial sector buoyancy

Over and above the normal influence of the cycle, financial-sector buoyancy appears to have boosted corporate net lending (Figure 3.4). About one-fifth of the overall increase in corporate net lending over the 2001-05 period stemmed from the financial sector, even though the financial sector accounts for less than 10% of value added. Panel regressions of financial sector net lending identify a role for the ratio of house prices to rents and broad money growth relative to GDP growth whereas no impact could be identified for the output gap.⁵

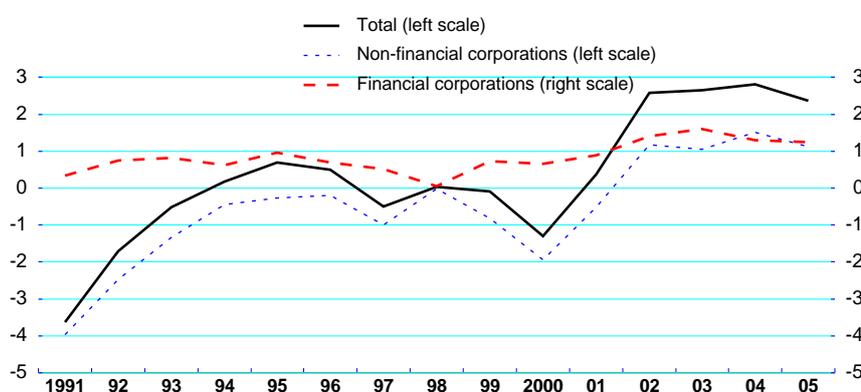
The correlation of cyclical and financial effects is unusual

The confluence of the cyclical and financial effects, together accounting for a rise in corporate net lending of about 1% of GDP, is atypical. Historically, net lending in the financial and non-financial sectors has not been strongly correlated.⁶ In any case, a normalisation of the cyclical situation, a return of velocity to its long-term trend and a fall of house price-to-rent ratios to historical norms would, on the basis of the estimated equations, lead to a drop in corporate net lending of nearly 1% of GDP compared with its 2005 level.

4 . See André *et al.* (2007) for more details.

5 . The results, however, remain conjectural because many of the financial variables come out significantly and with the expected sign for only a sub-group of countries (which usually included the United States, the United Kingdom, Canada and Australia). See André *et al.* (2007) for more details.

6 . Of the ten countries considered here, the correlation is positive and significant (at the 5% level) for only three countries (Japan, the United Kingdom and Canada). Conversely, there appears to be much greater co-movement in the net lending of the non-financial sector across countries, and similarly for the financial sector, at least among the larger countries. Across 45 pair-wise country comparisons, non-financial corporate net lending is significantly positively correlated in over two-thirds of cases.

Figure 3.4. OECD financial and non-financial corporate net lending¹

1. Aggregates include Australia, Canada, Denmark, Finland, France, Germany, Italy, Japan, Netherlands, United Kingdom and United States.

Source: OECD Annual National Accounts, national sources and OECD calculations.

Longer term factors have also played a role

In addition to cyclical and financial effects, there have been other factors, some of them accounting for a possible long-term increase in net lending, as reflected in time trends and/or shift variables in panel regressions of corporate net lending. In order to analyse the possible reasons for these trends, and so provide some insight into whether they will continue, it is useful to distinguish between gross corporate saving and gross fixed capital formation, noting that the increase in OECD corporate net lending between 2001 and 2005 reflects a roughly equivalent rise in gross saving and fall in gross fixed capital formation (Figure 3.1, above).

Identifying factors behind the increase in gross saving

The increase in the profit share may be long lasting

An important long-term influence seems to come from a general shift in profit shares. Corporate gross operating surplus as a share of GDP rose by 1¼ per cent of GDP over the period 2001-05, broadly similar to the rise in corporate saving. Much recent research suggests that the shift in income distribution towards profits can be ascribed to globalisation, technological change and wage moderation, the latter being at least in part linked to the former two influences.⁷ These global trends have accelerated in the recent period and wage moderation explains to some extent the increase of the OECD aggregate operating surplus since 2001.

7. See Molnar *et al.* (2007), IMF (2007), OECD (2007), Ellis and Smith (2007), and Hornstein *et al.* (2007).

Higher net property income has also contributed to saving

Lower net interest payments and higher property income have also contributed to the trend increase in corporate gross saving. The fall in net interest payments reflected the combination of further declines in interest rates and the de-leveraging of corporate balance sheets after high indebtedness in the late 1990s. The positive contribution of net property income reflected to some extent an increase in profits from abroad.⁸

The effect of inflation is now marginal

Correcting the corporate gross saving ratio of non-financial corporations for inflation gains (as it erodes the real value of their nominally denominated liabilities) changes historical profiles significantly; in particular gross saving would be increased substantially in the 1980s, and the long-term upward trend in a number of countries would tend to flatten or even be reversed.⁹ However, in the first half of the current decade, adjusting for inflation has not had a significant effect on trends in countries' gross saving ratios,¹⁰ with corrections for inflation raising or reducing the change in profits over 2001-05 by around 0.2% of GDP in the largest countries.

The impact of taxes on gross savings changed over time

At the OECD aggregate level, lower taxes (as a per cent of GDP) supported gross saving until 2002-03, after which, tax payments rose more quickly than profits, likely reflecting the progressive exhaustion of carry-over provisions for past losses and greater limits on tax sheltering activities. Since then, government accounts for 2006 and preliminary data for 2007 suggest that corporate income tax receipts have exhibited further buoyancy in most OECD countries.¹¹

Global forces behind lower investment ratios

Investment has been weak

Lower corporate investment as a per cent of GDP accounts for half of the increase in OECD aggregate corporate net lending from 2001 to 2005. Investment spending declined sharply as a share of GDP in the early 2000s and has since recovered only slowly (Figure 3.1 above) remaining well below its 2001 level in 2005.

Lower relative prices of capital goods reduced investment ratios

An important influence on corporate investment over recent decades has been the well-documented fall in the relative price of investment goods, which can be partly explained by the growing importance of computers, semiconductors and software in combination with their rapidly falling

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- 8 . The net property income item includes dividends received (but is not net of those paid) from both national and foreign sources, reinvested earnings on foreign direct investment, primary incomes received from the investment of insurance technical reserves. In some countries, notably Japan and Italy where cross-shareholding is important, the rise in this income source was also due to an increase in dividend payout ratios (see below) reflecting the asymmetric treatment of dividends received (included) and paid (not included).
- 9 . See André *et al.* (2007). Due to limited data availability on corporate sector balance sheets, it is only possible to adjust long term trends in three of the seven major OECD economies.
- 10 . See as well Box 1 in IMF (2006).
- 11 . See Chapter 1, "General Assessment of the Macroeconomic Situation".

prices starting in the 1980s. The implication is that firms over this period were able to increase real investment with lower nominal outlays. In the absence of such a fall in prices, and for the same real investment path, investment ratios (in nominal terms) would have shown an upward trend in most countries, or downward trends would at least have been moderated (for Germany and Japan). This phenomenon has also affected investment ratios over the first half of the current decade.¹² For the major seven countries, about half of the fall in the ratio of nominal business investment to GDP can, in an accounting sense, be attributed to lower relative prices (Table 3.2), the other half reflecting lower real investment.

Table 3.2. **The effect of changes in the relative price of capital goods on investment-to-GDP ratios**

2001-05, percentage points

	Change in I/GDP (nominal)	Change in I/GDP assuming constant relative price of investment
United States	-1.3	-0.9
Japan	0.1	0.3
Germany	-1.3	-0.6
France	-0.7	-0.2
Italy	0.0	0.1
United Kingdom	-1.5	-0.6
Canada	-0.2	1.2
Total (weighted by GDP)	-1.0	-0.5

Source: OECD calculations

Lower user cost of capital did not spur domestic capital deepening...

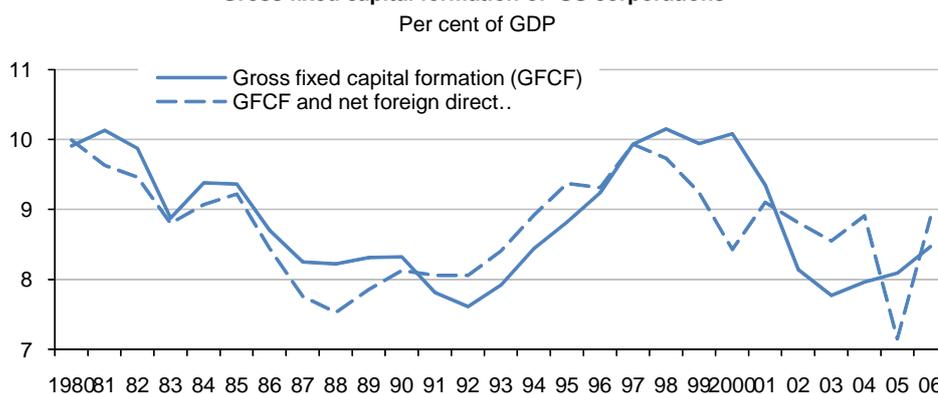
The decline in the relative price of investment goods, however, raises other questions. Coupled with the low interest rates and healthy equity markets seen over most of this period, the user cost of capital has been lowered as well, which in turn should have encouraged capital deepening. The opposite has been the case. This may possibly be due to previous over-accumulation of capital. Another possible explanation, at least for some countries, is that potential growth rates have declined over the past half decade compared with the 1990s in several of the major economies, implying less need for investment.¹³

12. In the United States for instance from 2000 to 2006 the price of non-residential investment increased by 6.3% compared with 16% for the GDP deflator. The price of structures increased by 50% while the price of information processing equipment and software declined by 20% and the price of other investment (industrial equipment, transportation equipment, other equipment) increased by 10%.
13. Analysis provided in André *et al.* (2007), suggests, however, that this explanation holds only for a few countries (Italy, Japan, and to a lesser extent Germany).

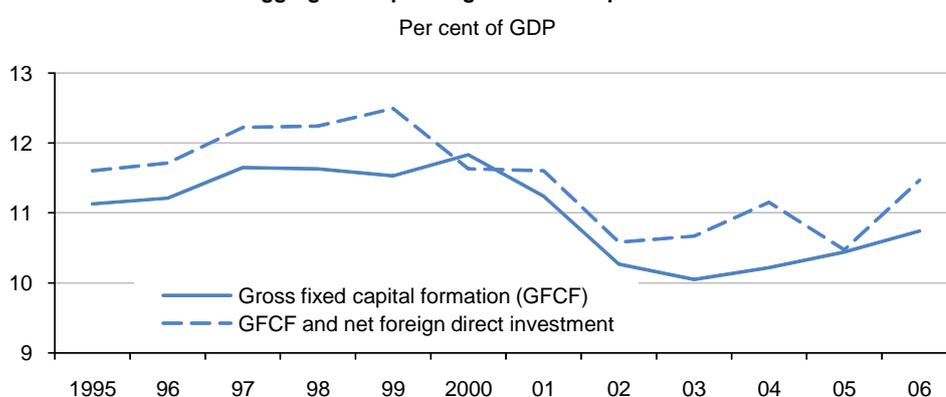
*... while corporations
invested more abroad*

Decisions to invest in assets other than domestic physical capital may be the counterparts of some of the observed investment patterns. In particular, foreign direct investment may have been a substitute for domestic fixed capital formation.¹⁴ Adding such flows to domestic investment suggests that some of the increased net lending in the OECD has been used to fund direct investment abroad since 2001 (Figure 3.5).¹⁵ This is especially true for the United States where domestic investment has lagged the most (see next section).

Figure 3.5. Gross fixed capital formation and foreign direct investment
Gross fixed capital formation of US corporations¹



OECD Aggregate corporate gross fixed capital formation^{1,2}



1. In 2005, net foreign direct investment of US corporations is reduced by 1.5 percentage point of GDP as a temporary effect of tax legislation. The impact on aggregate OECD net foreign direct investment is about 0.6 percentage point of GDP.

2. Aggregates include Australia, Austria, Canada, Czech Republic, Denmark, Finland, France, Germany, Italy, Japan, Netherlands, Poland, Spain, United Kingdom, United States.

Source: OECD Annual National Accounts, OECD Main Economic Indicators and IMF International Financial Statistics

14. Among others, Moëc and Frey (2006) make this point in the case of the United States. In addition to fixed investment abroad (either green-field investment or fixed investment in existing structures), FDI flows include acquisitions of companies abroad.
15. The 2005 drop in US net outflows was triggered by changes in tax legislation (the American Jobs Creation Act of 2004) that reduced the rate of taxation on US multinational enterprises' qualifying dividends from abroad for one year. As a result, the distributions of earnings from foreign affiliates to parents in the United States increased in 2005 while earnings reinvested in affiliates abroad were reduced by a similar amount.

The forces shaping cross-country differences

The bulk of the increase in net lending comes from four countries

The increase in aggregate OECD corporate net lending hides heterogeneous country patterns in both saving and investment (Figure 3.3, above). Disproportionate contributions to high net lending have come from Japan, Germany and the United Kingdom, which together contributed over three-quarters of the increase in OECD corporate net lending over the period 2001-05 (while accounting for less than one quarter of OECD GDP), with Japan accounting for around 40%. The United States also made a large contribution to the overall change in OECD corporate net lending, but this was mainly by virtue of its size rather than because of an exceptional change in corporate net lending. Conversely, net lending declined in some other countries (including France and Italy).

Some factors behind the increase are country specific

In the case of Japan, the increase in net lending represents a continuation of a trend which has underpinned a sustained recovery in corporate balance sheets from the financial crisis of the early 1990s and which has been further boosted by gains in competitiveness since 2000.¹⁶ In the United Kingdom the increase in corporate net lending has been particularly large in the financial sector. For Germany, an important factor behind the improvement in corporate net lending has been the continued gains in competitiveness since the mid-1990s that has boosted profitability. By the same token, deteriorations in competitiveness have held back net lending in Italy (since the mid-1990s) and France (since 2000). As well, the contribution of individual countries to higher net lending has taken different forms, in the sense that it came from different sectors of the economy or from different components of net lending. These are further assessed by examining the components of net lending (Figure 3.6).

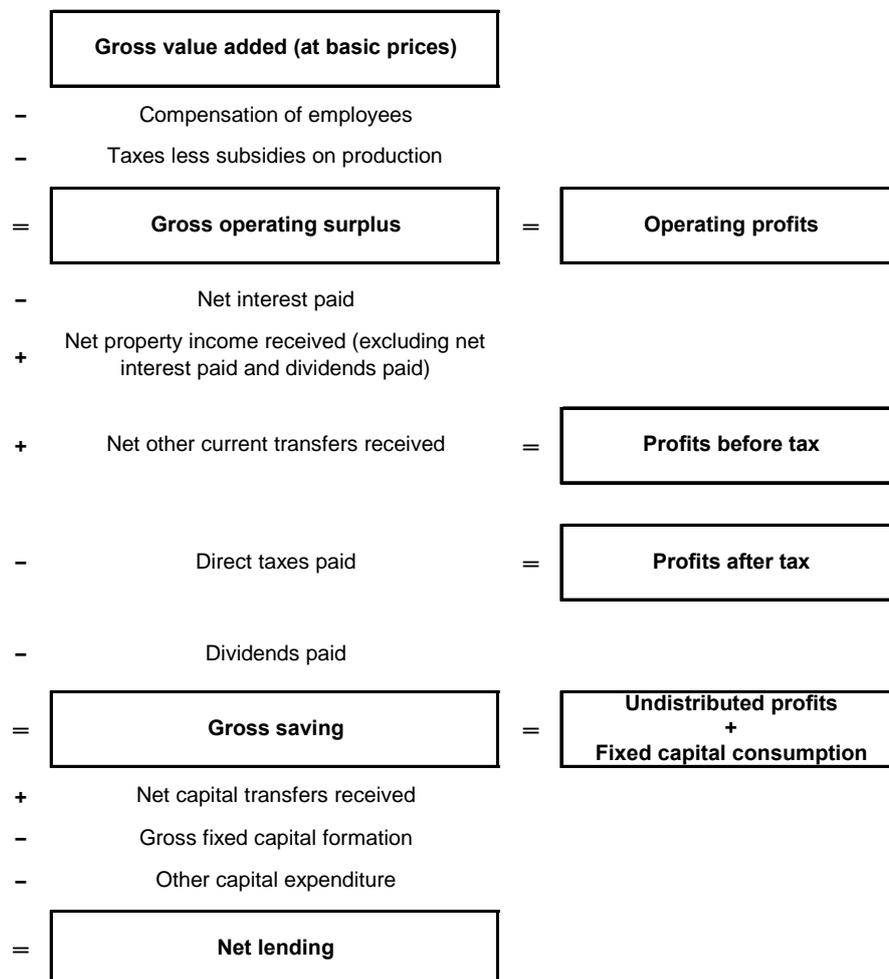
Cross country differences in the evolution of gross saving

Global factors drove increases in the gross operating surplus

Cross country differences in the evolution of gross corporate saving over the past half decade have tended to reflect to a large extent those of the gross operating surplus (Figure 3.7). Such differences across countries are likely to be due to countries' exposure to already mentioned global factors (accelerated globalisation and technological progress), presumably depending on institutional framework conditions (such as product and labour market regulations), as well as the sectoral composition of their economies.¹⁷

16. The econometric analysis presented in André *et al.* (2007) suggests that improvements in international manufacturing competitiveness (a fall in relative unit labour costs) have a positive impact on profitability (saving) and hence net corporate lending in some countries.

17. Another potential source of country differences is the extent of the reliance on stock options as a part of employees' remuneration and its change over time. Labour costs, as measured by the national accounts, tend to underestimate the costs of stock options which are recorded only at the time they are exercised. However, no exhaustive cross country data are available to assess the magnitude of their impact.

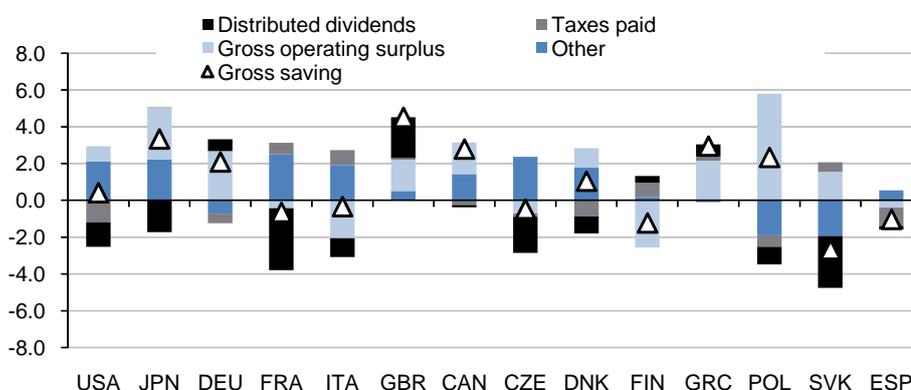
Figure 3.6. Main concepts used to describe corporate sector accounts

Sector composition and competitiveness shaped cross-country differences

A breakdown of the profit share (gross operating surplus as a per cent of GDP) into effects due to changing profitability within sectors and those due to changing sectoral composition shows that cross-country differences over the first half of the current decade have been mainly driven by within-sector effects (Figure 3.8).¹⁸ Looking at the changes in more detail, the contribution of the manufacturing sector is where differences across countries are most striking (Figure 3.9), reflecting to a large extent the evolution of competitiveness; the manufacturing gross operating surplus has risen strongly in Japan and Germany where there have been continued improvements in competitiveness, whereas the reverse has occurred in France and Italy. Other sources of cross country divergence come from the services to business that supported profits in the United Kingdom and the United States, and the extraction of crude petroleum and natural gas, and agriculture sectors that account for a large share of the increase in the United States (respectively 16 and 12%).

18. Due to data limitations such a detailed sectoral analysis is only possible at the gross operating surplus level.

Figure 3.7. Breakdown of the change in corporate gross saving (2001-05)
Per cent of GDP

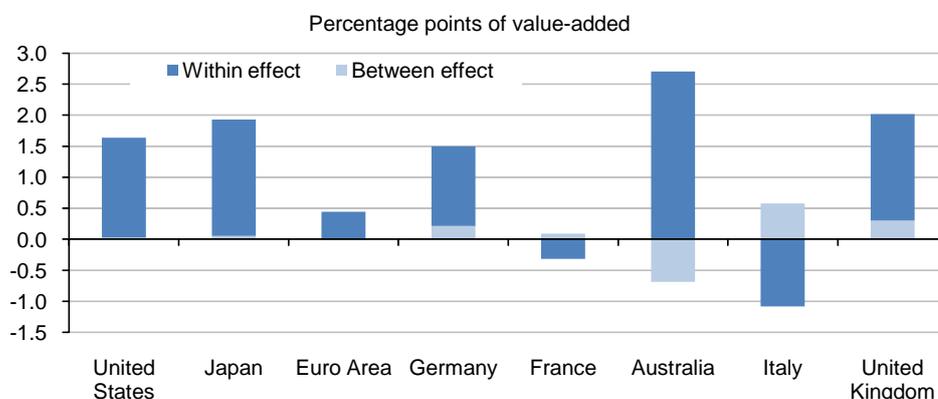


Note: Other consists of net property income and other transfers received less net interest paid.
Source: OECD Annual National Accounts and national sources.

The role of the financial sector stands out in the United Kingdom

On the other hand, the financial sector and, to a lesser extent, the construction sector contributed positively to the aggregate rise in profits in most G7 countries. Once again, the United Kingdom stands out for the exceptionally strong contribution of the financial sector.

Figure 3.8. Contribution of within and between sector effects to the change in the gross operating surplus (2001-04)



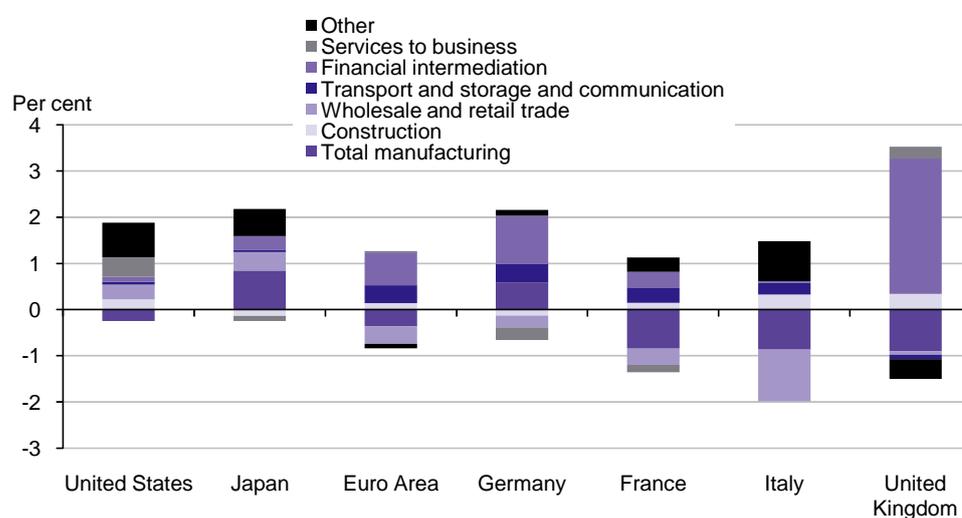
Source: EU-KLEMS and OECD calculations.

Dividend payouts were an important source of cross-country divergence

Dividends generally did not increase as fast as profits but there were also substantial cross-country differences in the extent to which dividends lagged profits and these were an important source of cross-country divergence in gross saving (Table 3.3). On the one hand, in the United States and in most continental European countries, dividend payout ratios increased over the period so that a large share of the additional profits was

transferred to shareholders.¹⁹ On the other hand, in Germany, Canada, the United Kingdom and Greece (and to a lesser extent Austria and Australia) dividends grew much more slowly than profits, boosting undistributed profits and gross saving.²⁰ It is not clear at this stage in which countries changes in dividend payout ratios observed since 2001 are temporary and in which countries they reflect more structural changes in the behaviour of corporations. Where corporate saving is high and payout ratios have decreased, shareholders could demand a larger share of profits in the form of dividends. Dividends may in any case continue to be a potential source of net lending divergence within the OECD corporate sector.

Figure 3.9. Contribution of the sectors to the change in the gross operating surplus (2001-04)



Source: EU-KLEMS and OECD calculations.

In the United States and the United Kingdom buybacks were important

The use of share buybacks to channel funds to shareholders complicates the assessment. Share buybacks involve the exchange of cash against equity and therefore do not affect national accounts gross saving while the distribution of dividends would. Statistically, buybacks appear as

19 . In the United States, the increase in dividend payouts also reflects the reduction of the personal income tax rates on dividend income (in 2003 from 38 to 15%). Both for the United States and Europe there is evidence that over 1989-2003 the increase in aggregate dividends hides the fact that fewer companies paid dividends but the ones which paid some, paid more. See von Eije and Megginson (2006).

20 . In the United Kingdom, this reduction may be a response to higher current and expected contributions to pension funds. Bunn and Trivedi (2005), using a large panel of quoted UK firms from 1983 to 2002, show that dividends are reduced in response to higher pension contributions. Companies that seek to tackle under-funding of defined benefit pension schemes by raising their contributions could pay lower dividends than they would have otherwise.

Table 3.3. Dividend payouts in various OECD countries

	Average payout 1995-2000 ¹	Change in profits after tax 2001-2005	Marginal payout 2001-05 ²
United States	36%	38%	51%
Japan	8%	27%	33%
Germany	57%	12%	8%
France	45%	19%	78%
Italy	59%	18%	92%
United Kingdom	57%	35%	8%
Canada	16%	50%	4%
Australia	36%	41%	27%
Austria	45%	34%	34%
Denmark	22%	26%	38%
Finland	28%	6%	48%
Greece	32%	56%	0%
Netherlands	32%	38%	88%
Spain	29%	26%	46%

Note: The average payout 1995-2000 is defined as the sum of distributed dividends over 1995-2000 divided by the sum of profits after tax. The marginal payout 2001-05 is defined as the change in dividends between 2001 and 2005 divided by the change in profits before taxes between 2001 and 2005.

1. 1999-2000 for Spain.

2. Figures in bold indicate a large payout over the recent period.

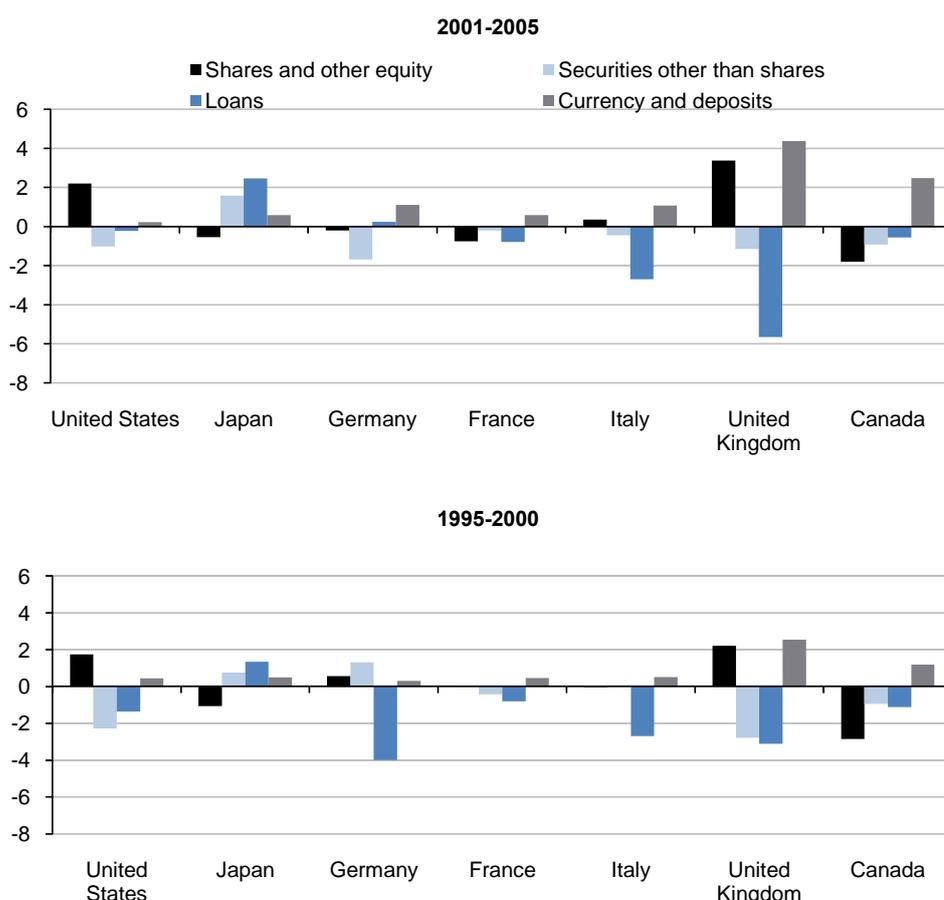
Source: OECD calculations

a use of corporate saving rather than as an influence on saving. In the United States, several sources suggest that share buybacks have increased at least as fast as dividends. Share buybacks by S&P 500 companies, from 2001 to 2005, rose by 1.5% of GDP; *i.e.* as much as aggregate dividends paid and more than net lending of the whole corporate sector.²¹ In a comparison of flow of funds data for non financial corporations, the United States stands out with a large increase in net purchases of equities that reflects net purchases of shares from other institutional sectors, as a result of share buybacks and mergers (Figure 3.10).²² In the United Kingdom, flow of funds data also suggest that share buybacks played an important role.²³ This increase in share buybacks, in the United States and the United

- 21 . Several factors tend to make buybacks attractive. In several countries, capital gains are taxed less than dividends. Share buybacks give also discretion to shareholders to opt in or out and to managers to avoid increasing and then cutting dividends. Furthermore, buybacks are more likely when companies have distributed many stock options, both as a response to concerns regarding excessive dilution and because they potentially benefit the holders of options while dividends do not. Last, buybacks are also a signal that management believes the stock is undervalued. See for instance Legg Mason Capital Management (2006).
- 22 . A major difference between this situation and that of the late 1990s, where net equity purchases were also important, is that corporations over the 2001-05 period did not borrow to fund equity retirements but instead relied more on savings. The holding of cash does not seem to have increased significantly in the United States, contrary to some widespread views.
- 23 . Cash holdings (deposits and short-term assets, as well as a residual item to insure that the accounts add up) have tended to increase in many countries, most notably in the United Kingdom and Canada, which may reflect an increase in firm-level uncertainty, either due to general factors such as globalisation or more country-specific factors such as the degree of under-funding of company pensions.

Kingdom, is likely to have an important cyclical component (when profits are increasing, share buybacks are a way to channel extra funds to shareholders without taking the risk of having to cut dividends if profits drop subsequently). In other countries, such operations have only been liberalised recently (in most cases in the late 1990s) and data are difficult to obtain. Some data suggest, however, that in the euro area buybacks have not increased significantly over 2001-05.²⁴

Figure 3.10. Financial flows of non-financial corporations: selected items
Annual average, per cent of GDP



Note: Excluded are insurance technical reserves, other accounts receivable and the statistical discrepancy.

Source: OECD National accounts and national sources.

Cross-country differences in the evolution of gross investment

Gross investment patterns are quite similar across countries

There is less heterogeneity across countries in the evolution of corporate investment ratios since 2001 than in the evolution of corporate gross saving ratios. In most OECD countries, investment spending as a percentage of GDP declined in the early 2000s and has since recovered

24. See ECB (2007).

only slowly. In 2005, it remained below its 2001 level in nearly all countries including the largest ones (Figure 3.3, above). Nevertheless, while in Japan, the United Kingdom, Germany and Canada it is higher gross saving that contributed most to the increase in net lending, in the United States it is lower investment.

The weakness of US investment during this cycle remains a puzzle

Indeed, the development of US business investment as a share of GDP from the most recent cyclical trough has lagged behind that in other countries as well as that experienced in earlier recoveries. Differences in the evolution of steady-state investment-to-GDP ratios due to changes in potential growth and depreciation rates do not seem to provide an explanation as to why investment has been particularly weak in the United States, compared both with other countries and previous US recoveries.²⁵

The future evolution of corporate net lending and its implications

Looking forward, net lending is likely to reverse partly...

Looking forward, and based on the analysis presented here and summarised in Table 3.1 above, some of the factors that have driven aggregate OECD corporate net lending are likely to fade or reverse while others, that reflect structural changes in corporate behaviour and in their environment, are likely to persist. These developments may have implications for interest rates and, to the extent that cross-country differences in net lending impacted current accounts, something that is difficult to determine, there may as well be implications for global imbalances (Box 3.2).

Box 3.2. The relationship of corporate net lending with other sectors

Over the period 2001-05, the association between changes in corporate net lending and changes in external imbalances has been fairly tight (Figure). Countries with more marked increases in corporate net lending have generally experienced stronger improvements in their current account positions. Conversely, countries with decreasing, stagnating or modestly increasing corporate net lending typically experienced deteriorating current account imbalances. The reasons behind this correlation, which is stronger over this recent period than it used to be, are not entirely clear though some conjectures may be made.

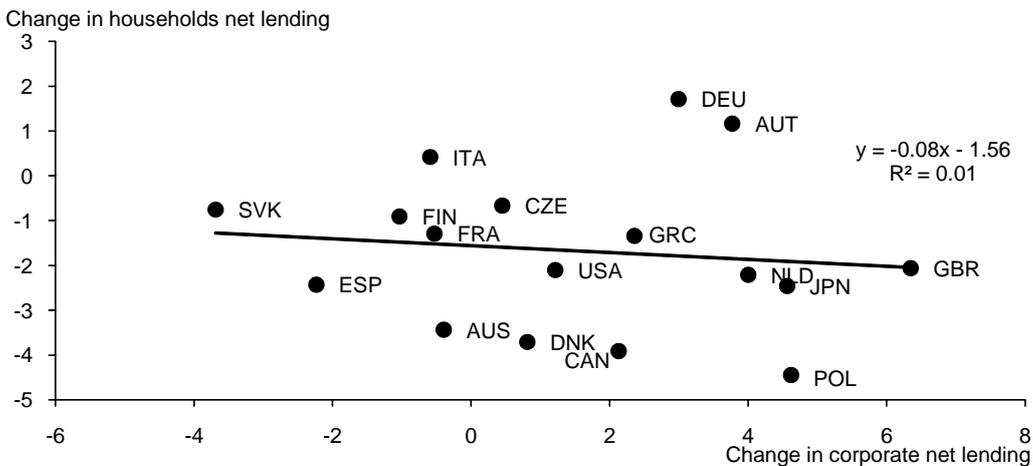
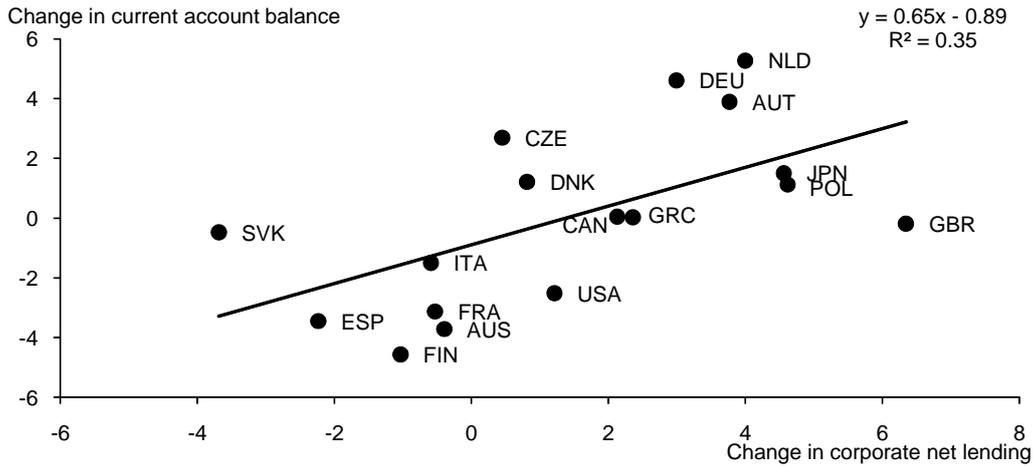
Cross-country data show almost no relation between changes in household net lending and changes in corporate balances. That is, where corporate profits and saving have increased they have to a much lesser extent been ploughed back into domestic investment or generated commensurate increases in household spending, possibly suggesting difficulties in “piercing the corporate veil”. Speculatively, concomitant changes in current account imbalances and corporate net lending may reflect ongoing financial globalisation trends. When it takes the form of increasing FDI flows, financial globalisation may weaken the link between domestic corporate saving and domestic investment. In this scenario, which is supported by some empirical evidence, increasing capital mobility jointly affects external balances and the national accounts measure of corporate net lending independently from changes in the relative strength of national saving. In addition, households with increasingly internationally diversified portfolios will respond less and less to domestic corporate saving and more and more to saving in the corporations they own abroad.

25 . See André *et al.* (2007).

Box 3.2. The relationship of corporate net lending with other sectors (continued)

The relationship between corporate and households net lending and the current account balance

Change between 2001 and 2005 in percentage points of GDP



Source: OECD Annual National Accounts and national sources.

... as saving decreases and investment accelerates

Recent information suggests that there has been a decline in aggregate OECD corporate net lending in 2006 (Figure 3.1 above). Based on the current *OECD Economic Outlook*, the immediate prospects are for a further modest fall in corporate net lending from that witnessed in 2006, due in the main to additional increases in business investment in Europe and Japan. The expected increase in labour costs would also reduce net lending,

although only mildly. This scenario is also consistent with the recovery maturing in most economies, a point at which net lending has historically tended to slow or fall. It also supposes that commodity prices stabilise, putting a cap on further increases in profits in countries such as the United States (as well as the other major commodities producers such as Australia and Canada). The contribution of the corporate sector to global saving is therefore likely to decrease further in the near future.

But housing and financial turmoil may provoke stronger adjustments

The limited adjustment in corporate saving presented in this scenario may still underestimate the contraction of profits in the financial sector as a result of the financial turmoil, particularly where it contributed the most to the increase in profits.²⁶ This scenario may also underestimate the full impact of the on-going adjustment in the US housing market that affects profits both in the financial sector and in construction. The possibility of housing market adjustment in other countries is another downside risk to OECD corporate gross saving. On the other hand, the tightening of credit standards may slow corporate investment growth to a larger extent than expected.

26 . According to recently released data for 2006, such an adjustment already started in 2006 in the United Kingdom, even before the 2007 financial turmoil.

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