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Housing, Financial  
and Capital Taxation  
Policies to Ensure Robust  
Growth in Sweden

**Müge Adalet McGowan**

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**HOUSING, FINANCIAL AND CAPITAL TAXATION POLICIES TO ENSURE  
ROBUST GROWTH IN SWEDEN**

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**By Müge Adalet McGowan**

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## ABSTRACT/RÉSUMÉ

### **Housing, financial and capital taxation policies to ensure robust growth in Sweden**

Extensive structural reforms since the early 1990s have strengthened the resilience of the Swedish economy to shocks. However, more needs to be done to better manage near-term risks and ensure that growth remains sustainable in the longer run. Reforming the housing market would reduce the risks associated with high house prices, ensure adequate residential investment and improve labour mobility and well-being. Clarifying the division of responsibilities in financial regulation and improving the macroprudential toolkit would reduce the risks to stability and the contingent fiscal liabilities arising from a large, concentrated banking system. Better aligning the taxation of different types of assets would make taxation more neutral.

This Working Paper relates to the 2012 *OECD Economic Survey of Sweden* ([www.oecd.org/eco/surveys/sweden](http://www.oecd.org/eco/surveys/sweden)).

JEL Classification: D13; E21; G18; G21; G28; H2; R21; R31; R38.

Keywords: Sweden; growth; housing markets; rent regulation; household debt; financial stability; macroprudential regulation; bank resolution; capital taxation.

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### **Marché du logement, secteur financier et fiscalité du capital : conduire des politiques propres à garantir une croissance vigoureuse en Suède**

Les réformes structurelles de grande envergure conduites depuis le début des années 90 ont renforcé la résistance de l'économie suédoise aux crises. Cependant, il faut aller plus loin encore pour mieux gérer les risques à court terme et faire en sorte que la croissance persiste dans la durée. Une réforme du marché de l'immobilier faciliterait un atterrissage en douceur des prix des logements, une hausse de l'investissement résidentiel et une amélioration de la mobilité de la main-d'œuvre et du bien-être. Préciser la répartition des responsabilités dans la réglementation financière et améliorer la panoplie d'instruments macroprudentiels permettraient d'apaiser les menaces qui pèsent sur la stabilité et de réduire les engagements budgétaires éventuels liés à l'existence d'un système bancaire vaste et concentré. Une harmonisation plus poussée de l'imposition des différentes catégories d'actifs rendrait la fiscalité plus neutre.

Ce Document de travail se rapporte à *l'Étude économique de l'OCDE de la Suède, 2012* ([www.oecd.org/eco/surveys/suède](http://www.oecd.org/eco/surveys/suède)).

Classification JEL: D13; E21; G18; G21; G28; H2; R21; R31; R38.

Mots clés : Suède ; croissance ; marchés du logement ; contrôle des loyers ; endettement des ménages ; stabilité financière ; réglementation macroprudentielle ; résolution des défaillances bancaires ; imposition du capital.

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## TABLE OF CONTENTS

HOUSING, FINANCIAL AND CAPITAL TAXATION POLICIES TO ENSURE ROBUST GROWTH IN SWEDEN.....	5
Sweden is well placed to achieve robust growth but faces some challenges .....	5
The increase in house prices partly reflects structural problems.....	6
High household and corporate debt create vulnerabilities.....	12
Addressing potential risks in the banking sector.....	17
The banking system is large and concentrated .....	17
Financial supervision tools can be further strengthened.....	19
The institutional set-up and crisis management tools should be enhanced.....	21
Improving the efficiency of capital taxation .....	23
Property taxation.....	25
Financial capital taxation.....	27
Conclusions .....	28
Bibliography.....	29

### Tables

1. Short-term and long-term impact of wealth on consumption.....	13
2. Characteristics of the major banks, end-2011 .....	19
3. Distribution of income and taxes, 2009.....	24

### Figures

1. GDP per capita gap between Sweden and the highest-income OECD economies.....	5
2. Housing market developments .....	7
3. Regional real house prices.....	8
4. Construction prices and costs .....	9
5. New construction of dwellings by tenure .....	11
6. Household debt.....	12
7. Housing market and household indebtedness.....	14
8. Household assets .....	15
9. Types of loans, as a share of mortgages .....	16
10. The size of the banking system .....	18
11. Private credit growth .....	20
12. Risk weight of mortgages under Basel II .....	21
13. Property taxation .....	25
14. Gap between market interest rate and after-tax debt financing cost.....	26

### Boxes

Box 1. Main features of the housing market and recent reforms .....	10
Box 2. Consumption and wealth .....	13
Box 3. The four major banks have different business models.....	19
Box 4. Institutional set-up of financial supervision and crisis management .....	23
Box 5. The rise in top incomes.....	24
Box 6. Key recommendations on housing, financial stability and capital taxation policies .....	28



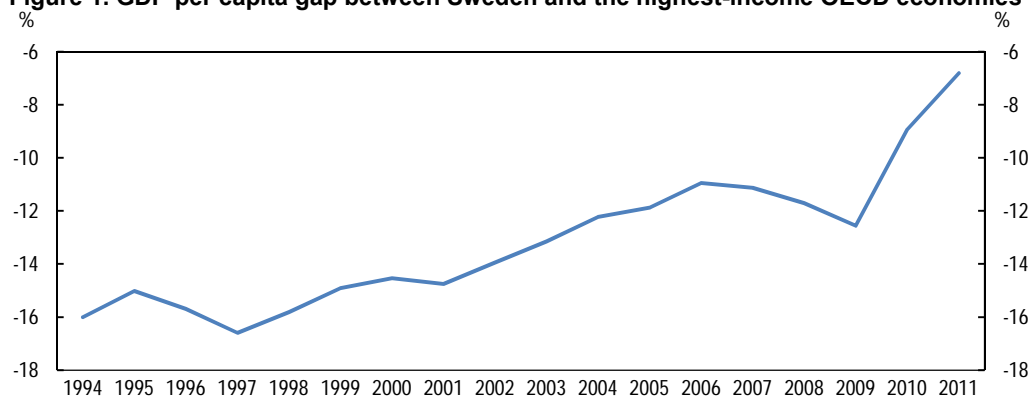
## HOUSING, FINANCIAL AND CAPITAL TAXATION POLICIES TO ENSURE ROBUST GROWTH IN SWEDEN

Müge Adalet McGowan<sup>1</sup>

### Sweden is well placed to achieve robust growth but faces some challenges

Thanks to sound macroeconomic and structural policies, the Swedish economy has performed well. The GDP gap *vis-à-vis* the highest-income OECD economies continues to narrow, reflecting robust productivity and employment growth (Figure 1). Going forward, Sweden is well placed to achieve sustainable long-term growth, but faces some challenges. The international environment is less supportive than before the global crisis and the build-up of some domestic imbalances creates further risks, which could be aggravated by spillovers from the euro area crisis.

**Figure 1. GDP per capita gap between Sweden and the highest-income OECD economies<sup>1</sup>**



1. The highest-income OECD economies are the upper half of the OECD countries in terms of GDP per capita expressed in PPP terms at constant 2005 international US dollars in 2010. The gap is computed as the percent difference between Sweden's GDP per capita and that of a simple average of the highest-income OECD economies.

Source: OECD, *Analytical Database*.

Higher real incomes, low interest rates and lower property taxes have boosted demand for housing, but structural problems such as strict rent regulation, zoning laws and high construction costs have restricted the supply response, leading to a steep rise in real house prices. Increasing housing prices coupled with high household indebtedness have made households vulnerable to labour and housing market as well as interest rate shocks. The banking sector is large and concentrated, with high potential contingent

1. Müge Adalet McGowan is an economist in the Economics Department of the OECD. This paper was originally produced for the 2012 OECD *Economic Survey of Sweden* published in December 2012 under the authority of the Economic and Development Review Committee (EDRC). The author would like to thank Andrew Dean, Jørgen Elmeskov, Robert Ford, Stéphanie Jamet, Vincent Koen and Pierre LeBlanc, as well as officials from the Swedish government, for valuable comments on earlier drafts. Special thanks go to Thomas Chalaux for technical assistance and to Nadine Dufour and Pascal Halim for technical preparation.

liabilities for the government. Capital taxation favours institutional savings and investment in owner-occupied housing and might have decreased the efficiency of the allocation of savings.

Addressing the shortcomings of housing and mortgage markets would both limit risks in the short run and strengthen growth prospects in the long run. Enhancing financial stability by filling in the gaps in the institutional set-up of financial supervision and the macroprudential toolkit would help address the problems that might arise from a disorderly deleveraging by households and disruptions in international capital markets. Making the tax system more neutral and uniform would reduce the risk of imbalances building up in the future.

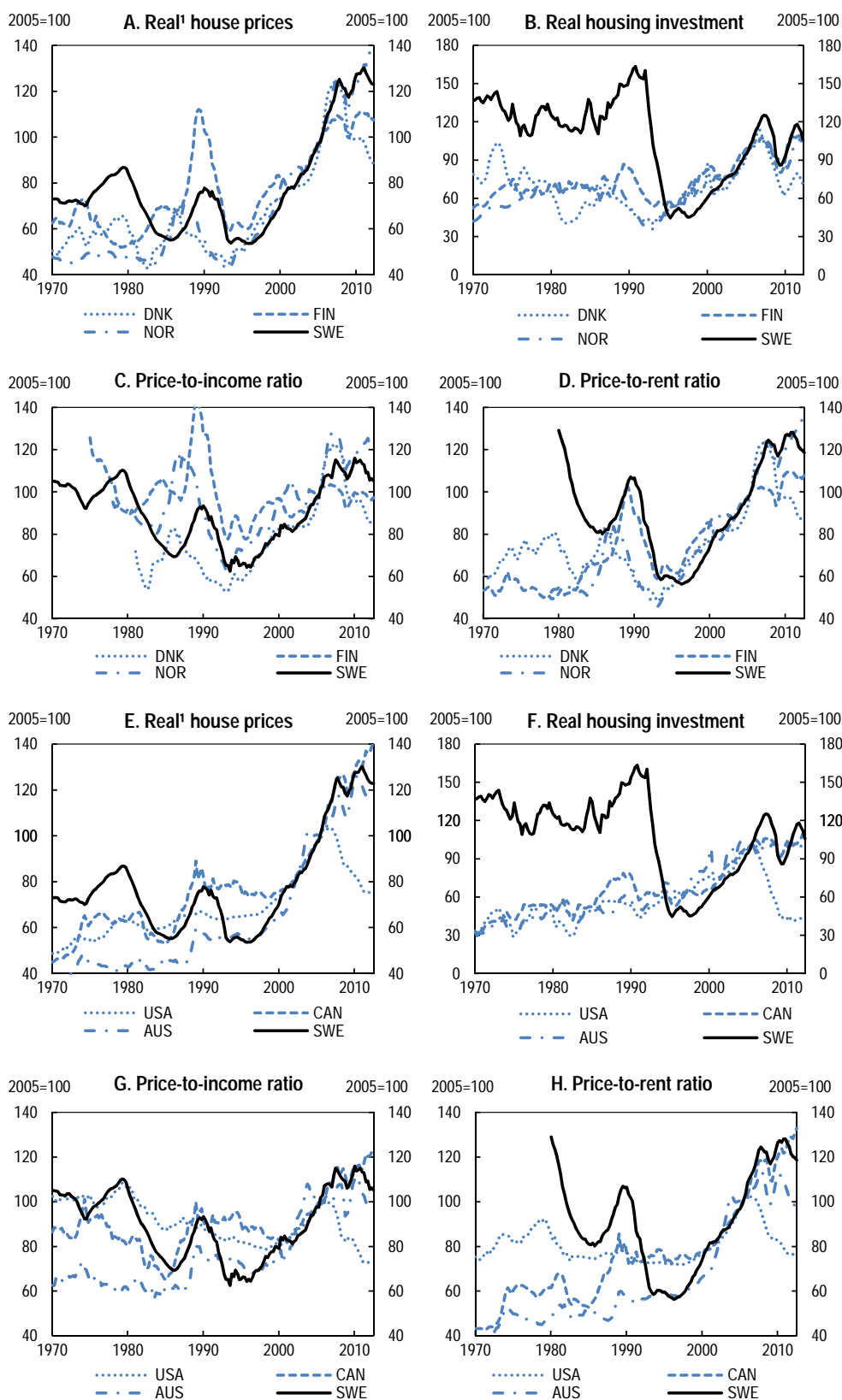
### **The increase in house prices partly reflects structural problems**

Real house prices have risen markedly over the past 15 years and remain high in historical perspective, notwithstanding some recent declines, while residential investment is low (Figure 2, Panels A and B). Riksbank analysis of the housing market shows that economic fundamentals and limitations on housing supply explain most of the house price increases (Riksbank, 2011a). Other studies and models yield a range of results as to whether house prices are overvalued in Sweden. Those that find some overvaluation still suggest that a potential correction may not severely impact the financial system (IMF, 2012a; European Commission, 2012a). Nevertheless, addressing the structural problems that have pushed up house prices would improve the resilience of the housing market and of the economy more broadly. The predominant demand factors driving house prices include rising real disposable incomes, even during the crisis due to the stimulus and resilient labour markets; the decrease in property taxes and deductions for home improvements; rental regulation; and falling mortgage rates and amortisation requirements. The supply side factors include the reforms in the 1990s that caused a decline in new construction; weak competition in the construction sector; and administrative uncertainties related to zoning and building permits.

Housing affordability has been negatively affected by rising prices, but has been aided by low interest rates and new financial instruments that have improved access to finance, especially for first-time buyers. Price-to-income and price-to-rent ratios have risen and remain above historical averages, although the rental regulations that keep rents below market values make the second indicator less reliable (Figure 2, Panels C and D). Overall, thanks to increasing incomes and lower interest rates, mortgage payments as a share of income have remained low. However, labour market and interest rate shocks could reverse the situation. Lower affordability can limit family formation, reduce mobility, make it hard to hire and retain workers in regions of high house prices, increase the cost of living and lead to social inequalities.

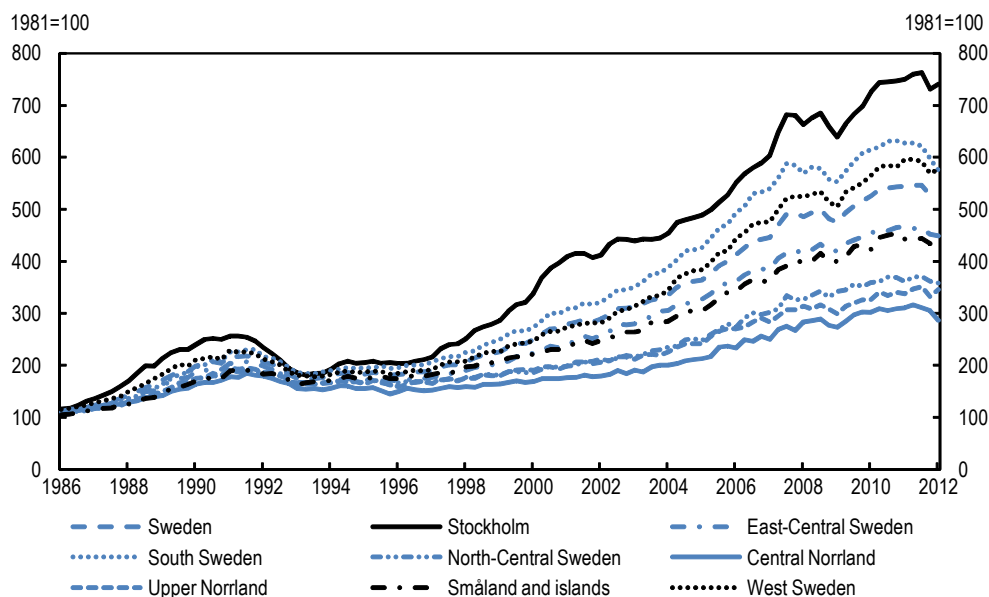
Housing supply is restricted by a complex, lengthy and uncertain planning process. Municipalities play a leading role and apply different building permit requirements, which may be detrimental to construction firms by decreasing predictability and limiting the possibility to carry out the same projects in different parts of the country. As a result, companies tend to work in municipalities they are familiar with rather than nationwide, which restricts competition and pushes up building costs (Swedish Ministry of Social Affairs, 2011; Swedish National Board of Housing, Building and Planning, 2011). In 2012, the government set up a committee to harmonise the application of the Planning and Building Act by all municipalities. As in many other countries, there are geographical differences in house price developments, with higher house price increases in urban areas compared to rural ones (Figure 3). This partly reflects the lack of supply response. The supply response in urban areas with high demand for housing can be damped by the authorities' preference for a lower population density, blockage by current residents, restricted availability of land or lack of incentives for municipalities to provide land. Streamlining the planning process and making it faster as well as eliminating the obstacles to increase the capacity of the construction industry would contribute to a better match of demand and supply.

**Figure 2. Housing market developments**



1. House prices are deflated using national accounts private consumption deflator.  
 Source: OECD, *Economic Outlook 92 Database*; national sources and OECD calculations.



Figure 3. Regional real house prices<sup>1</sup>

1. House prices are deflated by the national consumer price index.

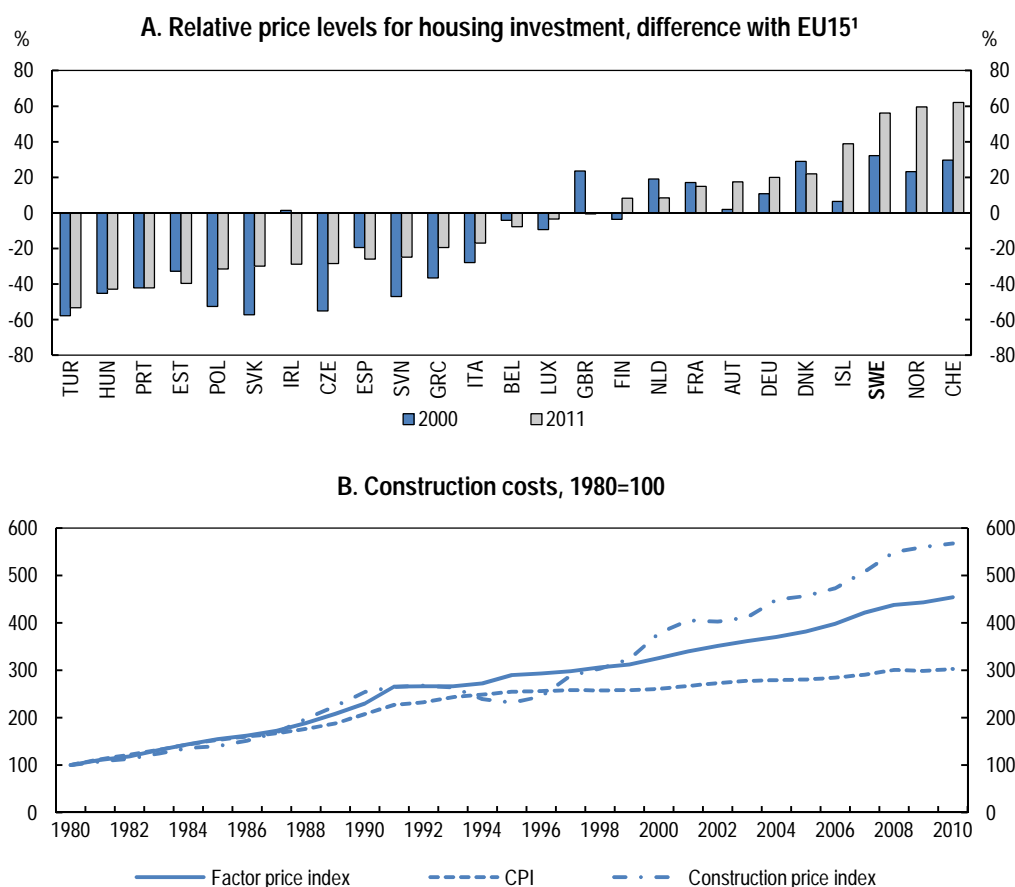
Source: Statistics Sweden.

Progress has been achieved with respect to the building planning and zoning process, but it can be improved further. The May 2011 Planning and Building Act cut the decision time for a building permit to 10 weeks and made the production of development plans (designating residential, commercial and industrial areas) simpler and shorter by dropping the construction plan requirement, which defined the type of building to be built. However, the appeals in cases of building plan rejections remain lengthy. The Budget Bill for 2013 increases the resources for processing appeals at the country administrative boards. Furthermore, the government has commissioned studies of the municipal land design policy with a view to increase the availability of municipal land for housing, but more can be done. Recently, the fastest-growing source of new construction has been tenant-owner apartments, but the process of setting up co-operatives is slow and cumbersome (see below). Co-operatives typically own one apartment building and a new one is formed for every project, including new buildings, conversions or modernisation of old ones. Relaxing these rules would increase the responsiveness of housing supply.

Swedish housing investment is sensitive to house prices and construction costs (Andrews *et al.*, 2011; National Housing Credit Guarantee Board, 2011). The rapid increase in house prices over the past decade has been accompanied by an expanding construction sector, albeit rising from very low initial levels. It is hard to establish the causality between construction costs and house prices, but in Sweden both have increased rapidly.

Construction prices have risen fast and are now among the highest in Europe, at about 55% above the European average (Figure 4, Panel A). This is partly due to an increase in land costs, driven by a lack of supply. The factor price index, which measures costs of inputs, including labour, materials, transport and machinery, is a better indicator of construction costs and has risen by 2.2% per year over the past decade on average, compared to 1.3% per year in the decade prior to that (Figure 4, Panel B).

Figure 4. Construction prices and costs



1. Housing investment refers to gross fixed capital formation in construction. Based on purchasing-power parity exchange rates.  
Source: Statistics Sweden and Eurostat.

High construction costs can be explained by limited competition and heavy regulations regarding input materials (OECD, 2007; Swedish Competition Authority, 2009). The construction sector is concentrated, with considerable horizontal and vertical integration. A few large firms hold the largest share of the market and have been found to engage in cartel-like behaviour and bribery (OECD, 2004; Sjöblom, 2011). This creates high entry barriers, including for foreign firms. The prospects of small and foreign firms are further restricted by a land distribution process that tends to favour established large domestic companies, and the nature of the tendering process where certain tenders are too large, not well-specified and take a long time between submission and results. Accordingly, the access of small and foreign firms to the public procurement process should be enhanced by improving its timeliness, predictability and clarity. It is also important to ensure that the high cost of building materials does not disadvantage smaller firms who rely on larger vertically-integrated companies for the provision of building materials.

The Swedish housing market displays several idiosyncratic features (Box 1). One is that tenant-owner co-operatives (*bostadsrätter*) have long been a widely-used institutional arrangement to own an apartment in Sweden. The co-operatives own the buildings and take out mortgages to fund part of the value of the land and buildings, while the rest is financed by contributions from members in return for tradable occupancy rights. Under this arrangement, there are tight restrictions on an owner who wishes to sublet or rent an apartment, as the tenant co-operatives have a veto right. Another specificity concerns the rental sector, with a large share of public housing and relatively strict rent controls. Furthermore, so far there have been strong restrictions on purchasing an apartment with the purpose to rent it out, curtailing the supply of rentals.

### **Box 1. Main features of the housing market and recent reforms**

#### **Housing market structure**

The Swedish housing market, which consisted of 4.5 million dwellings in 2010, has four segments: single family owner-occupied housing and tenant-owner co-operatives, making up 41% and 20% of the total housing stock, respectively, and private and public rentals, accounting for 22% and 17%, respectively. The growing popularity of tenant-owner co-operatives has contributed to the rise in owner occupancy rates, with combined ownership rates reaching 61% in 2010, up from 53% in 2007. The largest decrease from 2007 to 2010 was observed in private rentals, which made up 29% of the housing stock in 2007, while public rentals only decreased by 2 percentage points in the same period.

#### **Rent regulation**

The rent regulation system, introduced in the 1940s to avoid unfair rent increases, has been softened since. Until recently, the price was determined by a collective bargaining system between the tenants association and the municipal housing companies, which set a price ceiling for the whole rental market. In 2005, the Swedish Property Federation initiated a complaint to the European Union (EU) that the municipal housing companies receive unlawful state aid since they get implicit credit guarantees from their respective municipalities, making it possible for them to charge below market prices. The complaint was found justifiable by the EU and in January 2011, the rent regulations were adjusted such that there are now separate negotiations between the local tenants association on the one hand and private and public housing companies on the other.

#### **Recent and proposed reforms**

An inquiry was announced in the 2012 Spring Budget Bill to look into how to durably improve the conditions for investing in and managing rental housing. In the Budget Bill for 2013, measures were announced that are expected to increase housing construction and improve the utilisation of the existing housing stock. New measures to relax some of the restrictions in rent setting relate to the rules concerning tenant co-operatives' right to veto subletting, periods of notice and reclaiming rights of a tenant after the expiry of the rental contract. Furthermore, an increase in the standard deduction for a person letting their own home to SEK 40 000 per year, an increase in the length of time when apartment rents are not subject to a review by the regional rent tribunal (which mediates in disputes regarding rents, subletting and transfers) and relaxing the restrictions on renting out one's own apartment are proposed in order to increase the supply of rentals. Measures in the Budget Bill for 2013 expected to boost housing construction include a reduction in the municipal property tax for rental units, an extension of the reduction of the municipal property tax on new residential housing construction to 15 years and an extension of the permitted period for market-based rents for newly-built housing to 15 years.

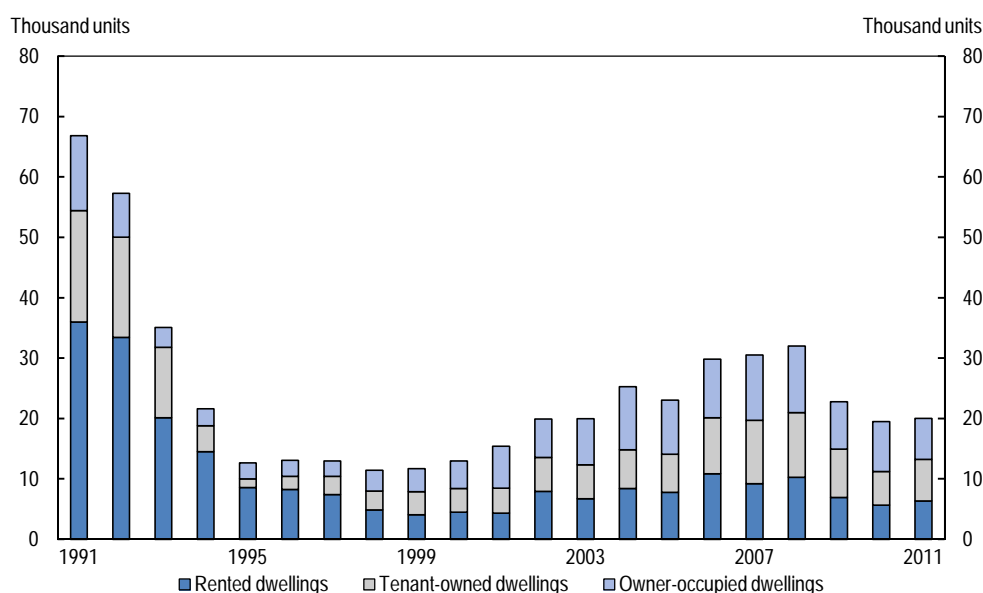
These features have created a number of problems:

- With rents not in line with costs, the return on construction of new rental dwellings is low, especially in high-growth areas where land prices and construction costs are high. This impedes the supply response to demand changes, resulting in low levels of construction of rental houses (Lind, 2003). Actual rents that are lower than market-clearing rents, especially in attractive areas in larger cities, have encouraged property owners to sell to housing co-operatives, leading to an increase in the conversions of rental apartments into tenant-owner co-operatives (Johansson, 2006). As a result, the share of rental housing has decreased and that of tenant-owner co-operatives has increased in the past two decades (Figure 5). Low property taxes on owners have also contributed to this trend (Fastighetsägarna *et al.*, 2010). These developments have generated segregation issues as higher-income families can more readily afford to purchase tenant-owner apartments (Magnusson and Turner, 2008).
- Rents have been historic-cost based, dependent on management and maintenance costs and reflecting the age of the buildings while geographical location plays a minor role. This does not provide incentives to develop rental houses where they are most demanded, which may dampen labour mobility.

- High demand and low supply in popular areas have led to inefficient queuing and black market activities (Ball, 2012). The system lacks transparency and in some municipalities, allocation of rental housing depends on queuing time or vaguer criteria, such as matching the right apartment to the right tenant. Private rental companies can use their own criteria regarding rent-to-income ratios, number of household members or children to allocate vacant apartments, which can be restrictive and discriminatory. Tenants also have the legal right to exchange leases with each other, creating a secondary market and making the regular rental queues even longer.

Overall, the rent regulation framework may have generated inequities. It favours insiders at the expense of outsiders (Wahlström, 2011). Furthermore, residents in rent-controlled apartments in attractive locations typically are born in Sweden to Swedish parents and they are likely to have a higher income than residents in rent-controlled apartments in less attractive locations (Brogren and Fridell, 2006). Nonetheless, studies have found no direct link between segregation and rent regulation (Lind and Hellström, 2003).

**Figure 5. New construction of dwellings by tenure**



Source: Statistics Sweden.

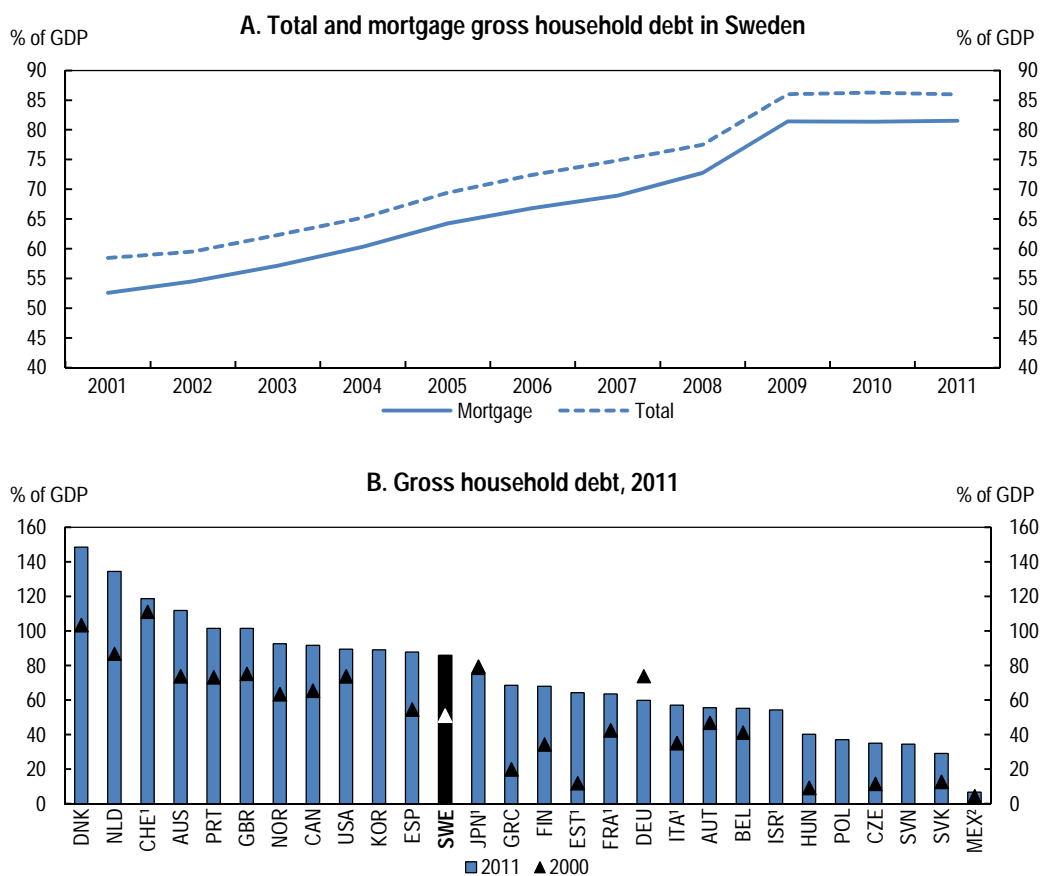
Progress has been made to address the housing market's shortcomings (Box 1). Rents set by public housing companies are no longer the standard for all rents and there are separate negotiations between local tenant associations and private housing companies. This should help align rents with market fundamentals. As a result, the number of private rental companies has increased slightly as private pension funds and construction companies have started entering the rental business. However, this has not been reflected in house prices yet partly because the strict rules for taking disputes to rent tribunals have prevented rents from rising. Legislation allowing the construction of owner-occupied apartments was introduced in 2009, which was expected to contribute to increasing the size of the rental property market since owners can rent out these apartments. However, by January 2012, only four owner-occupied apartments had been formed in Stockholm, suggesting that their effect on the long-standing problem of insufficient supply of rental apartments has been limited so far. The measures in the Budget Bill for 2013 will contribute to increasing the supply of rentals and are a welcome move towards easing the rental market. However, the remaining restrictions, such as those on an owner to rent an apartment and on a person to buy an apartment to rent it out, should be phased out completely. Efforts to phase out rent controls and align rents with market values should also continue.

### High household and corporate debt create vulnerabilities

Over the past two decades, household debt has risen to historically high levels, reaching 174% of disposable income and 84% of GDP in 2011 (Figure 6). High private sector debt in Sweden has been flagged as a vulnerability in the European Commission’s Alert Mechanism Report in 2011. Debt can help smooth consumption and investment by households, firms and governments, improve the efficiency of capital allocation and lower macroeconomic volatility (Levine, 2005). However, high debt levels may have a negative impact on the economy both in the short and long run.

Highly indebted households may cut back consumption and increase savings in the face of adverse shocks, including a fall in house prices, aggravating downturns (Bouis *et al.*, forthcoming; Box 2). An analysis of past crises shows that housing booms accompanied by high household debt lead to larger economic losses (IMF, 2012b). There could also be implications for financial stability since the exposure of the financial system to the household sector is high and the share of mortgages in total loans to households increased from 68% in 2002 to 81% in 2012. High household debt can result in a higher probability of default and make repayment ability sensitive to shocks (Cecchetti *et al.*, 2011). However, the more likely transmission channel of a house price fall on financial stability is through its effect on banks’ costs and access to funding rather than major credit losses on mortgages (Janzén *et al.*, 2011). Financial stability could also be affected through lower household demand leading to credit losses in the banks’ corporate lending (Jönsson *et al.*, 2011).

**Figure 6. Household debt**



1. 2010.
2. 2009.

Source: OECD, Analytical Database.

### Box 2. Consumption and wealth

Developments in housing wealth and private consumption are closely related, partly due to a relaxation of the borrowing constraints of households in the face of increases in housing wealth. High house prices and household debt make the Swedish economy vulnerable to shocks. An error-correction model is used to assess the impact of the increase in household gross and net wealth on private consumption. In the long run, trends in consumption are closely related to trends in income and wealth. Consumption deviates from this long-run equilibrium in the short term but will tend to gradually revert to equilibrium over time.

A long-term equation relates private consumption to household disposable income, financial and housing wealth, while a short-term equation captures the dynamics and adjustment to temporary deviations from the long-term equilibrium.

**Table 1. Short-term and long-term impact of wealth on consumption<sup>1,2</sup>**

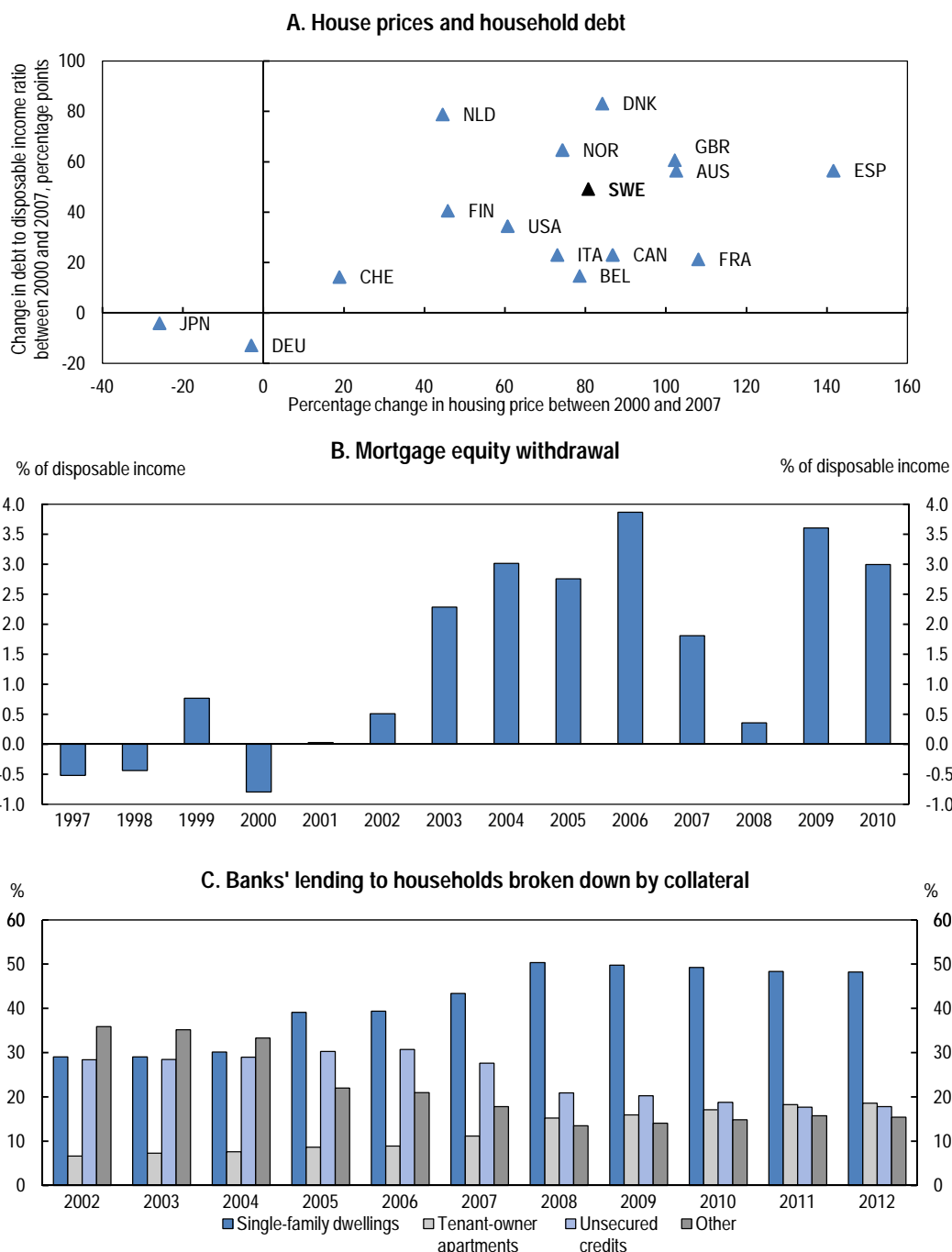
2001Q1-2011Q3				1982Q1-2011Q3			
Long-term		Short-term		Long-term		Short-term	
In C	MPC <sup>3</sup>	ΔIn C		In C	MPC <sup>3</sup>	ΔIn C	
<b>In Y</b>	0.49 (12.40)	0.56	<b>ΔIn Y</b> 0.16 (2.28)	<b>In Y</b>	0.51 (9.67)	0.57	<b>ΔIn Y</b> 0.16 (3.66)
<b>In NFW</b>	0.11 (3.75)	0.08	<b>ΔIn NFW</b> 0.11 (3.37)	<b>In GFW</b>	0.00 (0.06)	0.12	<b>ΔIn GFW</b> 0.14 (5.69)
<b>In NHW</b>	0.11 (4.91)	0.04	<b>ΔIn NHW</b> 0.06 (2.11)	<b>In GHW</b>	0.19 (25.67)	0.00	<b>ΔIn GHW</b> 0.07 (4.18)
<b>Constant</b>	11.16 (12.39)		<b>Constant</b> 0.00 (2.20)	<b>Constant</b>	10.95 (9.12)		<b>Constant</b> 0.00 (2.56)
			<b>ε</b> -0.42 (-3.35)				<b>ε</b> -0.13 (-3.62)
<b>R<sup>2</sup></b>	0.99		<b>R<sup>2</sup></b> 0.45	<b>R<sup>2</sup></b>	0.99		<b>R<sup>2</sup></b> 0.42

1. Δ denotes first order differences; t values are reported in parentheses. C = real private consumption, Y = real net household disposable income (excluding property income), NHW = net real housing wealth (housing assets minus households' mortgages), NFW = net real financial wealth (financial assets minus non-mortgage financial liabilities), GHW = gross real housing wealth, GFW = gross real financial wealth and ε = error term.
2. There is a break in the data series for mortgage loans in 2001 as the data only included mortgage loans from mortgage institutes and not from banks prior to 2001. The net financial and housing wealth definitions can only be used for the 2001Q1-2011Q3 period, while gross financial and housing wealth definitions are used for the 1982Q1-2011Q3 period.
3. The marginal propensity to consume out of net housing wealth varies over time, but its current value can be calculated as the product of the net housing wealth elasticity and the ratio of private consumption to net housing wealth at the end of the sample. The relatively low marginal propensity to consume out of household disposable income is partly due to the fact that the latter is highly correlated with household wealth. Dropping the housing or financial wealth variable increases the coefficient on real net disposable income. Other studies also find a low marginal propensity to consume out of household disposable income (Chen, 2006).

According to the regressions for the sample period starting in 2001Q1, shown in Table 1, the long-run marginal propensity to consume out of net housing wealth, at 0.08, is high compared to a number of other countries (Catte *et al.*, 2004; André and Garcia, 2012). The long-run marginal propensity to consume out of net financial wealth is 0.04, which is more in line with other countries. Similar to other countries, the results thus suggest that household consumption is far less sensitive to changes in financial wealth than to changes in housing wealth. This is in line with some of the other studies that investigate the links between consumption and different types of wealth in Sweden (Barot, 2007; Guo and Unal, 2011). One potential explanation may be that increases in property values are perceived to be more permanent by households (Bostic *et al.*, 2009). Moreover, the effect of increasing house prices on consumption is strengthened by the use of housing equity withdrawal. However, when the sample period starts in 1982, the marginal propensity to consume out of gross housing wealth is insignificant. This is similar to results found in Berg and Bergström (1995) and Johnsson and Kaplan (1999), suggesting that the effect of housing wealth on consumption might have increased over time.

Despite recent increases in the saving rate in response to uncertain economic conditions, household debt continues to rise in line with disposable income. There has been no major deleveraging in recent years, even though credit growth has gradually slowed down, and is currently below 5% per year. However, some of the factors contributing to household borrowing have reversed or may do so in the near future. Mortgage rates have increased, a guideline for a loan-to-value ratio (LTV) cap has been introduced (see below), and house prices have decreased and may decrease further.

**Figure 7. Housing market and household indebtedness**

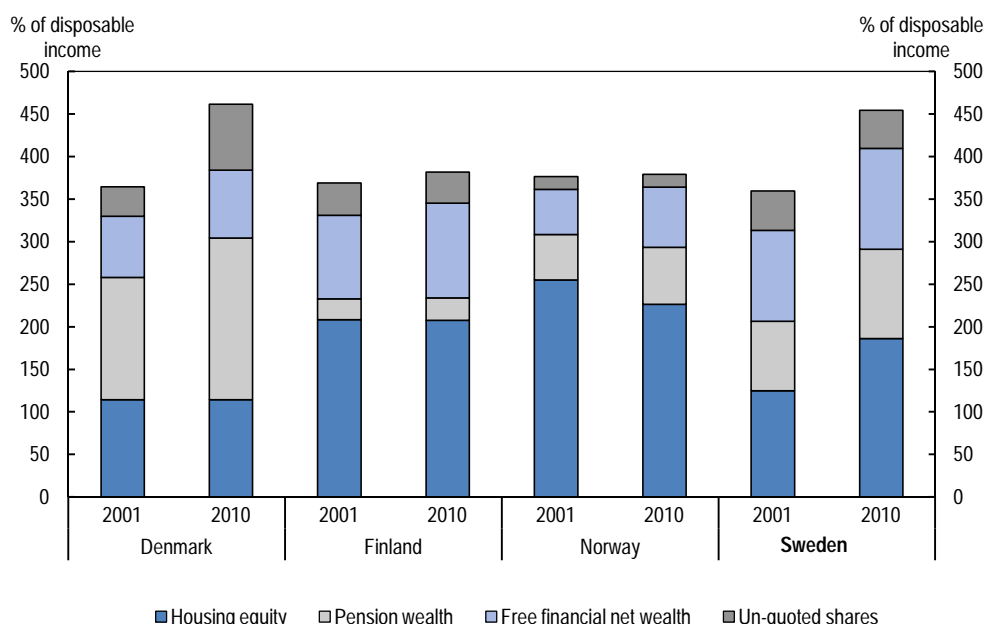


Source: OECD, *Analytical Database*; National Housing Credit Guarantee Board; the Riksbank and Statistics Sweden, *Financial Market Statistics*.

Several factors contributed to the rise in household indebtedness. Fiscal reforms and credible inflation targeting bolstered economic growth and household and business confidence, and therefore, stock prices, which increased household financial wealth. This, in turn, encouraged them to take on more leverage. Financial innovations allowing variable rate and non-amortised loans also helped fuel the borrowing boom, especially for first-time home buyers. The share of outstanding loans with an interest rate fixed for less than one year in total household mortgages increased from 40% in 2004 to 66% in 2011, though it has fallen back since, to 54% by August 2012. Furthermore, the feedback effects between household debt and house prices are quite strong. The rise in house prices forces households to borrow more in order to buy a house. Once they own a house whose value appreciates households use the rising value of collateral to borrow and spend more, as evidenced by the growth of mortgage equity withdrawals (Figure 7).

High household debt is accompanied by even higher household assets, at 510% of disposable income, and the saving rate is high, creating fairly large financial buffers (Figure 8). Household assets are three times their liabilities, suggesting that households have enough room in aggregate to withstand shocks. However, a large part of household financial portfolios are in equities, which are subject to volatile movements, and pension rights and property, which are illiquid, making households vulnerable to shocks.

**Figure 8. Household assets**



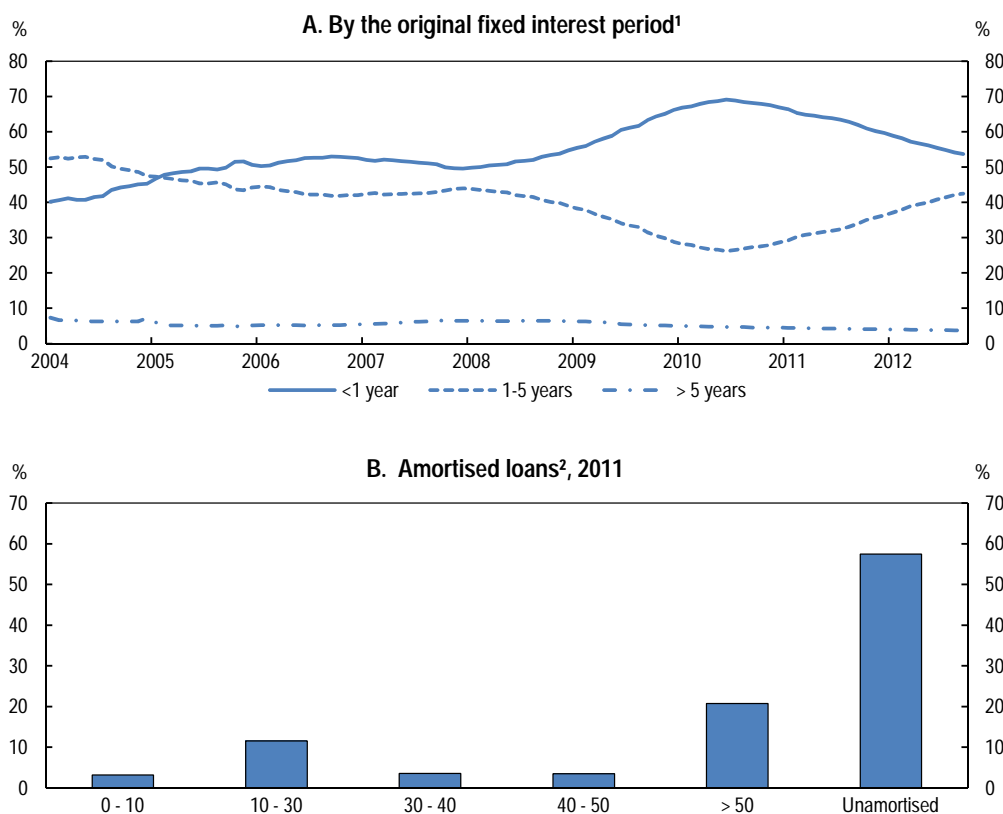
Source: Danish National Bank.

The risks associated with high aggregate household debt are limited by several factors. The bulk of the debt stock is held by households with high income and wealth: in 2007, the top 20% income earners held 57% of the debt and 44% of the assets. Mortgage debt has also mainly been incurred by those with higher incomes, with the top 20% income earners holding 60% of all mortgages, compared to 3% for the bottom 20% income earners. The welfare system and the widespread existence of two-income families support households' debt servicing ability in the face of unemployment spells. Swedish bankruptcy law is full recourse, decreasing defaults (Andersson and Lindh, 2011). Overall, credit standards have been high thanks to banks' vigilance after the 1990s crisis and the covered bond markets used to finance mortgages is resilient. Finally, unlike other countries with high house prices, highly regulated rental markets and structural factors restricting housing supply have held back the buy-to-let market and commercial lending exuberance, preventing the build-up of a speculative house price bubble.



However, notwithstanding the presence of buffers at the aggregate level, individual households may still face risks. Increased indebtedness, the widespread use of variable-rate mortgages and amortisation-free (interest-only) loans in the past decade make households more sensitive to interest rate, labour market and housing shocks (Figure 9). Between 2009 and 2011, the share of amortisation-free loans increased by 6 percentage points to 65%, while the average actual repayment period increased by four years to 70. Stress testing by the financial regulators tends to suggest that most households would be able to repay their loans even in the face of extreme shocks. However, non-performing household loans would cause losses for the financial system as banks are highly exposed in this regard (Riksbank, 2012a; Swedish Financial Supervisory Authority, 2012). Moreover, recent international experience has illustrated the limitations of stress tests, insofar as they rest on assumptions reflecting historical loan losses in quieter times and as they fail to fully capture feedback mechanisms between different sectors of the economy and the interaction of different types of shocks (see below). For that reason, the Riksbank is trying to improve its stress testing methods so as to better capture the uncertainty surrounding parameter estimates.

**Figure 9. Types of loans, as a share of mortgages**



1. Panel A shows the share of outstanding mortgages according to the original fixed interest period. For example, the share of mortgages with an original fixed interest period of less than one year peaked at 69% in June 2010.

2. Panel B shows the share of new loans according to their amortisation period in years. For example, in 2011, 20.7% of the new loans in the sample had an amortisation period of more than 50 years. Random sample based on Swedish Financial Supervisory Authority (2012), *Swedish Mortgage Markets*.

Source: The Riksbank and Statistics Sweden, *Financial Market Statistics* and the Swedish Financial Supervisory Authority.

Heightened competition among mortgage providers, high house prices and low interest rates led to ever-increasing LTVs. Higher LTVs are more common amongst more vulnerable households with lower incomes, who are more sensitive to interest rate shocks. Against this backdrop, the Financial Supervisory Authority (FSA) introduced a guideline of a 85% LTV cap on new loans and extensions to existing loans using property as collateral in October 2010.

The impact of the guideline for the LTV cap is uncertain. According to a survey conducted by the FSA, in 2011 LTVs for new loans decreased for the first time since 2002. Only 9% of the new mortgages had a LTV exceeding 85% – a 50% decline from the previous survey conducted in 2009. Fourteen per cent had a LTV of exactly 85%, suggesting that the mortgage cap has been binding. With the introduction of the cap, unsecured lending increased slightly, but remains small. On the other hand, circumvention of the LTV cap is possible and greater use of fixed-rate mortgages and amortisation are better ways to reduce household risk. LTV caps can be circumvented by borrowing against collateral other than property or through unsecured lending (Bryant *et al.*, 2011). Hence, the effects of the LTV cap and the characteristics of households that use variable-rate and non-amortised loans should be monitored closely. The FSA's survey in progress focusing on the amortisation of loans is a welcome step. Swedish banks already apply strict lending conditions as part of their standard operating procedures, which are monitored by the FSA. However, the supervisors should consider more formal and binding measures to ensure sound underwriting practices for non-amortised and variable-rate loans. For example, a binding requirement could be imposed that in order to get such loans the borrower should show they could afford the corresponding fixed-rate or amortised loan.

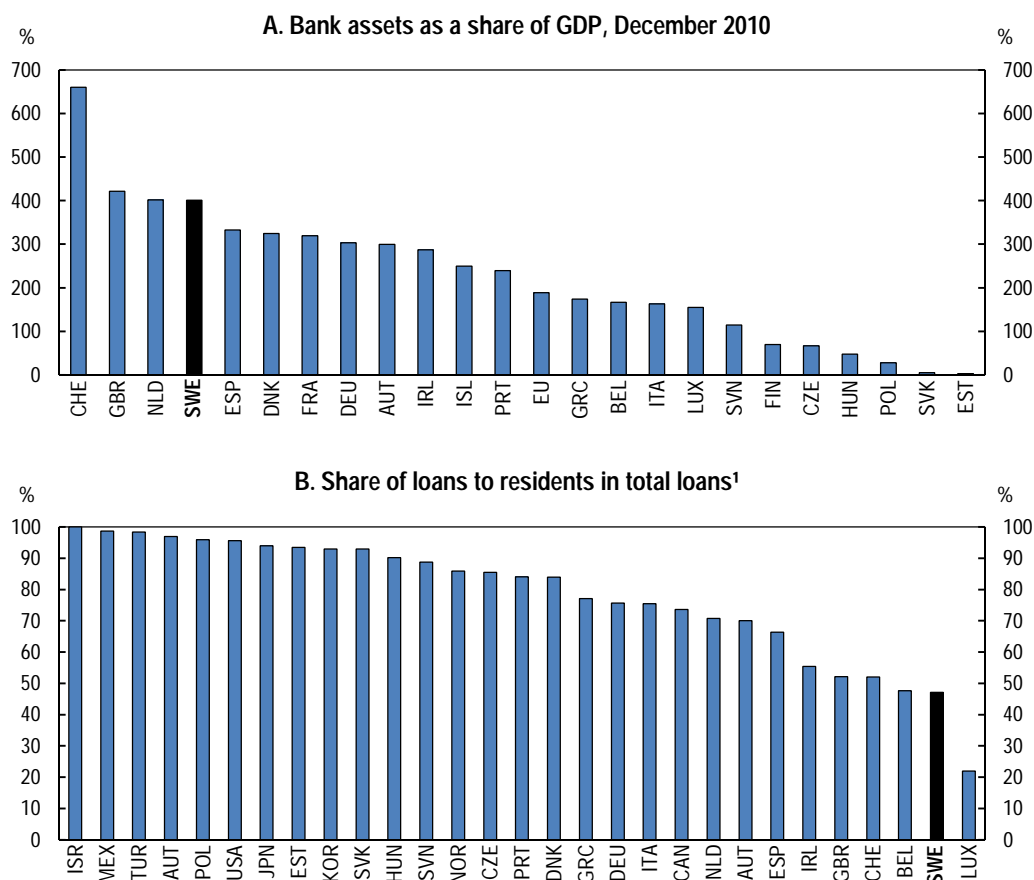
Corporate debt on the basis of consolidated data, at 139% of GDP in 2010, is more than twice as high as in the rest of the European Union. To some extent, this can be attributed to the large number of multinational companies operating in Sweden but with a debt not directly linked to the Swedish economy (European Commission, 2012b). This partly stems from the fact that many large multinational companies take advantage of the interest rate deductibility in the Swedish Tax Code by lending to their affiliates in Sweden to finance operations outside Sweden (Blomberg *et al.*, 2012). Furthermore, the debt-to-asset ratios, at 53% and 83% for consolidated and non-consolidated data, respectively, are below the EU average, and the total debt-to-equity ratio has fallen from 2.2 in 2000 to 1.7 in 2010. Nevertheless, the high level of corporate debt relative to the size of the Swedish economy needs to be monitored closely.

### **Addressing potential risks in the banking sector**

Financial stability is crucial for growth to be resilient and sustainable. Indeed, financial distress affects citizens as taxpayers if government resources need to be used to bail out part of the financial system, as borrowers if lending costs increase and as workers if economic growth is weakened and lending and investment channels are disrupted. Although the Swedish financial sector was hit by the 2008 crisis, through the drying up of funding markets and higher borrowing costs as well as its exposure to the Baltics (OECD, 2011), it coped relatively well thanks to the swift reaction of the authorities, a low exposure to toxic assets and the fact that house prices held up. However, some risks remain due to the nature and structure of the banking system, domestic imbalances and the institutional set-up.

#### ***The banking system is large and concentrated***

The total assets of the Swedish banking system are equivalent to four times GDP (Figure 10, Panel A). The implicit guarantees on bank debt reduce the funding costs for Swedish banks and might result in excessive risk taking by banks and large contingent liabilities for the government (Schich and Lindh, 2012; IMF, 2012a). The intimate links between certain banks and non-financial firms and the associated connected lending may also add to these risks, though action has been taken to limit such lending (IMF, 2011). Furthermore, the banking system is very concentrated and dominated by four major banks, which are exposed to a small number of large clients (Box 3). They account for three fourths of deposits and domestic lending, making them of systemic importance domestically. Moreover, they are connected through interbank deposits, making contagion a risk.

**Figure 10. The size of the banking system**

1. 2011Q4 or latest available year.

Source: The Riksbank (2012), *Financial Stability Report 2012:1*, Stockholm and IMF, *Financial Soundness Indicators*.

Another important feature of the large Swedish banks is their regional banking hub role. Their foreign claims totalled 164% of GDP in March 2012 (BIS, 2012), and a relatively high share of lending to non-residents (Figure 10, Panel B). The banks' exposure to the Baltics was a major reason the authorities intervened in the financial system in the most recent crisis (Swedish National Audit Office, 2011; OECD, 2011). Although this exposure has since been reduced, risks remain (Riksbank, 2011b). The FSA also points to spillover risks from EU countries. One reason for the problems associated with banks' exposure to the Baltics was that regulation did not keep up with the expansion of bank activities outside Sweden. Since then, there have been many efforts to improve cross-border banking regulation. At the EU level, co-operation between home and host countries has been facilitated by the so-called supervisory colleges and the European Banking Authority has the mandate to mediate between home and host countries. However, there are as yet no fully effective international crisis management and resolution tools or institutions, creating uncertainty and potential high costs (OECD, 2012a). Hence, cross-border financial supervision coordination through the Nordic-Baltic Memorandum of Understanding should continue to be enhanced.

**Box 3. The four major banks have different business models**

Handelsbanken, Nordea, SEB and Swedbank accounted for about 75% of overall deposits and lending in 2011. Nordea depends on non-deposit sources of funding more than the others and has the highest exposure outside Sweden. Swedbank has the highest share of mortgages in its lending portfolio (Table 2). Such differences in business models make it all the more important to monitor a range of indicators when assessing the healthiness of banks.

**Table 2. Characteristics of the major banks, end-2011**

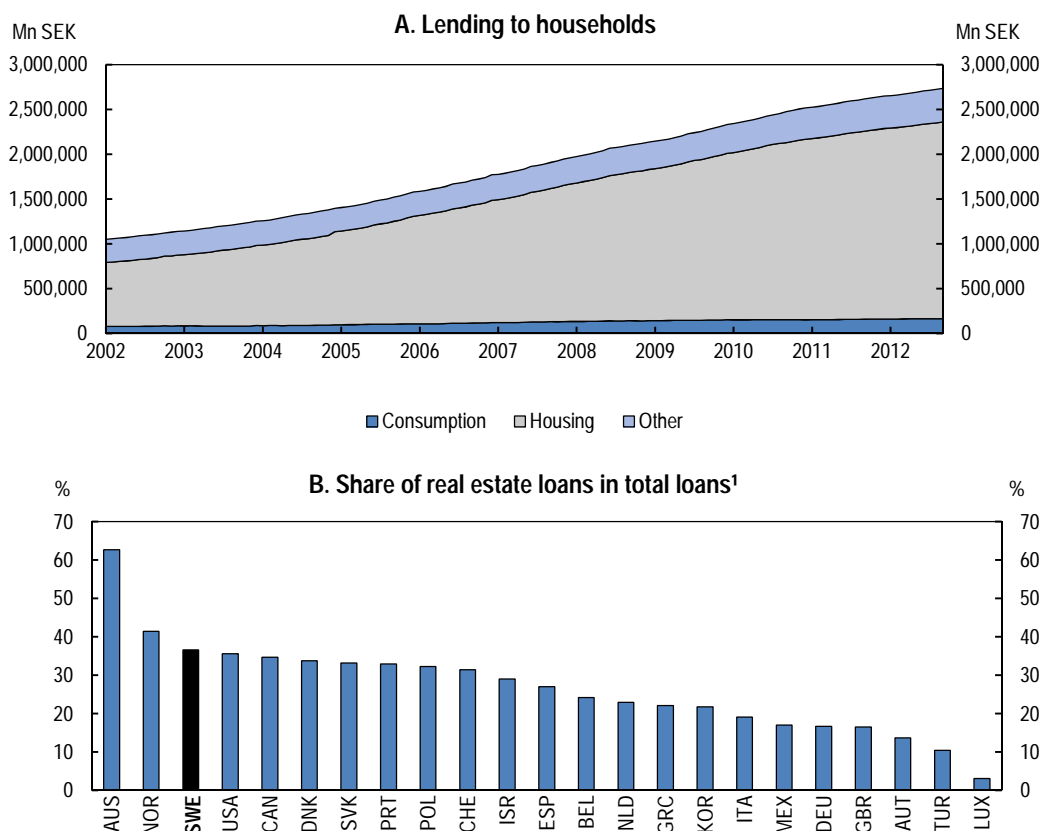
	Handelsbanken	Nordea	SEB	Swedbank
<i>Total assets in % of GDP</i>	70.3	185.1	67.6	53.2
<i>Share of total liabilities (%)</i>				
Deposits	29.5	26.5	36.5	30.2
Debt securities	46.5	25.1	25.0	42.1
Other	24.0	48.3	38.6	27.7
<i>Share of total loans</i>				
Mortgage loans	36.5	36.2	31.6	53.9
Other loans	8.2	9.2	3.8	3.2
Corporate loans	55.3	54.6	64.6	42.9
<i>Geographical exposure (%)</i>				
Sweden	71.0	23.3	67.1	86.3
Nordics	20.4	71.3	6.6	10.2
Baltics	0.0	2.1	7.5	2.5
Others	8.6	3.3	18.8	1.0

Source: Banks' annual reports.

***Financial supervision tools can be further strengthened***

Swedish banks are well capitalised both in international comparison and compared to 2008. Since then, capital ratios have been boosted by increased profits, rights issues and a decline in corporate loans in favour of mortgages, which carry a lower risk weighting (see below). Core capital ratios in the four largest banks already range from 12% to 18% of risk-weighted assets (based on Basel II methodology), well above the Basel III minimum standards. However, overall leverage ratios for some banks imply that capitalisation is less strong although by exactly how much depends on the definition of capital that is used (Riksbank, 2012b; Blundell-Wignall and Roulet, 2012; IMF, 2012a). The authorities' decision to implement higher capital requirements than envisaged by Basel III for the major banks in steps, in 2013 and 2015, and the forthcoming countercyclical capital requirements are welcome. However, relying solely on capital ratios, which weigh assets by risk, is not sufficient because banks can adjust their asset mix to reduce the required capital. As discussions on implementing a leverage ratio are on-going at the EU level, the authorities should consider introducing an overall leverage ratio (capital over total assets, non-risk-weighted) as a backstop to the risk-weighted capital measures.

Higher capital ratios have benefits and costs. They reduce risk taking and the probability of a crisis. However, they may weaken profitability and bank competitiveness in the short run, which could be reflected in higher lending rates and lower lending volumes. In Sweden, some of the costs of the new regulations are already being passed onto bank customers as evidenced by the recent widening of the spread between the repo rate and the banks' variable mortgage rates. However, banks have also focused on increasing earnings by cutting costs and as risks decline, shareholders' expected rate of return on equity due may diminish. A recent OECD study suggests that in general the cumulative GDP loss from higher capital and liquidity requirements is probably quite small (Slovik and Cournède, 2011). In the case of Sweden, the real economy effects of higher capital requirements are estimated to be small as capital ratios are already high (Riksbank, 2011c).

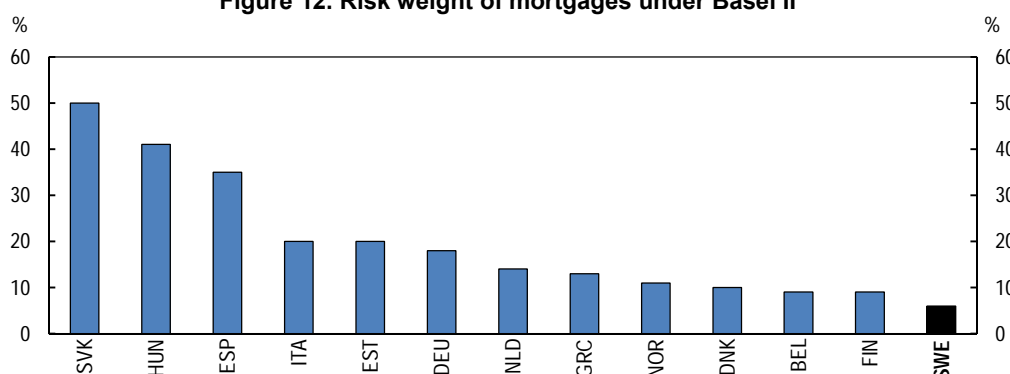
**Figure 11. Private credit growth**

1. 2011Q4 or latest available year.

Source: The Riksbank and Statistics Sweden, *Financial Market Statistics* and International Monetary Fund, *Financial Soundness Indicators*.

Expanding the toolkit to monitor different aspects of developments in bank balance sheets is important for crisis prevention. The recent crisis has shown that relying mainly on capital adequacy can be misleading and banks with low impaired loans and high capital adequacy ratios can face problems (White, 2012). Private credit growth and leverage are considered good predictors of crises and they have risen to high levels over the past decade in Sweden, with a large share of mortgage lending (Lane and Milesi-Ferretti, 2011; Figure 11). Studies point to the deviation of the ratio of credit to GDP from its trend, the deviation of credit growth from its long-term average and property prices as good advance warning indicators (Drehman *et al.*, 2010; Repullo and Saurina, 2011). Thus, in the risk assessment made by banks and regulators, it is important to closely monitor private credit growth and its components. Tools similar to the ones introduced in Denmark and Norway, which set thresholds on variables that signal risks, such as lending growth, and link automatic actions to their breach, could be considered.

Historically, low residential loan losses due to the strong welfare state, double-income households and full-recourse loans that lead to higher payment incentives have resulted in among the lowest risk weights for mortgage lending used by banks in Europe (Figure 12). According to Basel II, banks could determine the size of their risk-weighted assets according to their internal models (Bank of International Settlements, 2005). However, the risks to loan repayment arising from high household indebtedness and LTVs are not fully reflected in those risk weights. The FSA plans to increase the capital adequacy requirement for mortgages by imposing a floor on risk weights at 15%. Higher risk weights for mortgages should be implemented as soon as feasible, together with the forthcoming EU regulations on risk weights, to increase the resilience of the financial system.

**Figure 12. Risk weight of mortgages under Basel II<sup>1</sup>**

1. Risk weights for different types of assets have been determined by banks according to their internal models, at different times, in line with Basel II rules.

Source: The Riksbank (2012), *Financial Stability Report 2012:1*, Stockholm.

Despite a good capacity to handle loan losses, Swedish banks face larger liquidity risks than other European banks due to their reliance on market funding (Riksbank, 2011b). In May 2012, Moody's downgraded the long-term debt ratings for Nordea and Handelsbanken, partly on account of their reliance on wholesale funding. As pension funds absorb a large part of savings, the ratio of loans to deposits is high in Sweden. Swedish banks have improved their liquidity buffers since the start of the crisis by increasing their deposits with the central bank and their holdings of liquid securities. Assessing the risk and liquidity exposures of the financial system is important to limit vulnerabilities.

During the crisis, the Riksbank increased its holdings of foreign exchange reserves to provide liquidity support in foreign currencies, especially in dollars. Although swap agreements with the US Federal Reserve worked well, there is a need to have a more permanent way to deal with foreign liquidity risk. Making banks bear some of this cost by imposing liquidity requirements in foreign currency to reduce their short-term dollar funding or charging a fee for the use of the foreign exchange reserves at the Riksbank would lower this vulnerability. Hence, the forthcoming introduction of an aggregate domestic liquidity requirement similar to the Basel III liquidity coverage ratio (which ensures that banks hold sufficient high-quality liquid assets) by the FSA in January 2013 is welcome. In addition, large banks will be required to meet liquidity requirements separately in euros and US dollars. The maturity mismatch in the balance sheets, that is greater than for many other European banks, should be reduced by lengthening the maturity of market funding. Banks also need to get ready for stricter rules in the form of the net stable funding ratio, which aims at ensuring a sustainable maturity structure of assets and liabilities. In sum, the financial supervisors should continue to monitor banks' progress in reducing their dependence on wholesale funding. More transparent liquidity reporting by banks, as recommended by the Riksbank and stipulated by the new liquidity reporting framework of the FSA, will help.

### ***The institutional set-up and crisis management tools should be enhanced***

As the cost of financial crises can be very large, the quality of financial regulation and effectiveness of supervisory arrangements are essential. During the 2008 crisis, co-operation between the Riksbank, the FSA, the National Debt Office (NDO) and the Ministry of Finance worked well (OECD, 2011). However, as in many other countries, the crisis brought into focus some of the longstanding gaps in the financial stability framework. No institution had the authority to review the overall risks in the financial system and the necessary macroprudential tools. Although the Riksbank raised concerns regarding the Baltic exposures of Swedish banks, it did not have the mandate or the tools to address them. The FSA used the argument of consumer protection to introduce the LTV cap to deter consumers from taking on more debt than they can manage. But, given its lack of mandate for macroprudential regulation, it was not possible to refer to the

risks of disruption to the financial system as a reason for this measure. Although the exchange of information between the four institutions worked well during the crisis, they were based on a complex set of explicit and implicit arrangements. The division of responsibilities between the NDO and the Riksbank regarding liquidity assistance were not clear. Addressing these gaps is important to enhance financial stability.

The financial supervisory framework – described in Box 4 – is under review. In February 2011, a Financial Crisis Committee (*Finanskriskommittén*) was set up to make recommendations on bank resolution schemes, the division of responsibilities for macroprudential regulation, liquidity support, and the financing of deposit guarantee and stabilisation funds. Its report is expected by May 2013. In the meantime, the establishment of a council for co-operation on macroprudential policy in January 2012 by the Riksbank and the FSA is welcome. The eventual macroprudential authority will need to have a clear mandate, enforcement powers, and a toolkit that is appropriate for the major risks in the Swedish financial system. It will also need to be accountable. Macroprudential policy should also pay attention to the risks that might arise from related-party lending and the non-separation of investment and commercial banking.

In general, the choice of institutional set-up will depend on the country's financial structure, regulatory architecture and historical experience. It is generally argued that given their expertise in macroeconomic and financial analysis and their role in emergency liquidity provision, central banks should play a leading financial stability role (European Systemic Risk Board, 2012). In Sweden, the feasibility of five different models has been discussed (Berntsson and Molin, 2012). Among these, the establishment of a council with the different agencies involved is favoured by some (Swedish Fiscal Policy Council, 2011; IMF, 2012a). Such a council would add another layer to an already crowded institutional framework, and therefore would need to be designed carefully. If this option is not chosen and, instead, the responsibilities of the Riksbank in terms of financial stability are enhanced, a committee separate from the monetary policy committee should be established to maintain the credibility of both objectives, but communication channels between them should be clearly defined. If the responsibility were to mainly lie with the FSA, its resources would have to be increased beyond what has been the case to date and the links between its financial stability and consumer protection objectives should be clarified further.

In 2008, a Stabilisation Fund was created to finance government costs associated with providing support to financial institutions, with a target size of 2.5% of GDP on average by 2023. Setting the target size as a percentage of the total eligible liabilities of the contributing institutions, rather than GDP, would better address the risks arising from the large size of the Swedish banking system (European Commission, 2012c). An alternative could be to charge fees on an ongoing basis rather than fixing a target fund size. The financial institutions pay a special fee of 0.036% of their balance sheet total excluding equity capital and subordinated debt. Fees should be based in part on the riskiness of institutions, as judged by the supervisors. For example, the fees could be made progressive to reflect the greater risks stemming from the size and composition of balance sheets and dependence on wholesale funding. Furthermore, increasing the share prefunded by banks would limit the government's share of the fund, and thus lower the contingent liabilities of the state. An investigation is under way to assess whether the Deposit Guarantee Fund and the Stabilisation Fund should be merged and use risk-based fees. Given the highly concentrated nature of the Swedish financial system, it might be more practical to merge the two funds, but it might create confidence issues especially for depositors of small banks. A merger would also limit problems arising from the fact that the size of the deposit guarantee fund, at 2.4% of insured deposits, is relatively low compared to other countries, whose funds range from 1.25% to 5% of insured deposits (IMF, 2011).

Pending the EU Directive and the Financial Crisis Committee decisions on resolution schemes, banking problems would be addressed via the provisions of the Government Support to Credit Institutions Act. Unlike in many other countries, banking supervisors cannot initiate bankruptcy proceedings for financial institutions (IMF and World Bank, 2009), which can create uncertainty and could cause delays. A

bank resolution scheme, which ideally has special provisions for systemically important banks and is consistent with EU decisions, should be introduced as soon as is feasible.

#### **Box 4. Institutional set-up of financial supervision and crisis management**

Crisis management involves four main institutions and is governed by a variety of explicit and implicit agreements.

- The FSA has the objective of a stable and sound financial system and of effective consumer protection within the financial system. It authorises and supervises financial institutions.
- The Riksbank has the task of promoting a safe and efficient payment system, which in practice means that it has a broad responsibility for financial stability. The Riksbank oversees the development of the financial system as a whole, provides emergency liquidity assistance, if needed, and oversees systemically important payments, clearing and settlement systems.
- The National Debt Office manages the depositor insurance and investor protection systems and coordinates public support to a distressed financial institution.
- The Ministry of Finance bears the political responsibility for financial stability as the fiscal authority. It is also responsible for financial sector legislation and makes the ultimate decision to provide public support to banks in trouble.

The Financial Crisis Committee shall propose measures to improve the regulatory framework so that future financial crises can be avoided by preventive measures and if needed, resolved in an efficient manner. The mandate of the Committee is to:

- analyse and draw conclusions from the handling of the recent global financial crisis, both in Sweden and abroad;
- analyse the regulation of takeover and liquidation of financial institutions;
- analyse the interaction of the Riksbank, the National Debt Office and the Financial and Government Offices (primarily the Ministry of Finance) and the ability to exchange information;
- analyse and propose improvements in the regulatory framework for interventions that apply to the FSA;
- analyse and propose improvements to the framework for the Riksbank's management of issues related to financial stability, including the provision of liquidity support; and
- investigate and propose a risk-differentiated fee stabilisation fund.

#### **Improving the efficiency of capital taxation**

The design of capital taxation is important for efficiency and growth (OECD, 2012b). Capital taxation influences investment incentives, the allocation of savings and the degree of intergenerational mobility (Arnold *et al.*, 2011). A tax system that is neutral with respect to the type of asset avoids encouraging investment in unproductive uses. The large-scale 1991 tax reform, based on principles of uniformity (*i.e.* that economically equivalent incomes should be taxed in the same manner), brought the dual income tax system to Sweden: earned income is taxed at a progressive rate and capital income, including capital income and corporate profits, at a flat 30% rate. In the case of negative capital income, 30% of the deficit is deducted from the tax on earned income in that year. There have been many changes to the tax system since 1991, including changes to the marginal personal income tax rates, property taxes, the corporate tax rate and the value-added tax in different sectors, and the abolition of the wealth and inheritance taxes.

Sweden is one of the few countries that do not have either a wealth tax or an inheritance and gift tax. The arguments for the abolition of the wealth tax were relatively strong because taxation of wealth distorted savings and created incentives for capital flight (Sørensen, 2010; Swedish Fiscal Policy Council,



2011). The motivation for the abolition of the inheritance and gift tax were less clear, but one argument was that this tax could be an obstacle to the smooth transfer of ownership of small businesses from one generation to the next. Inheritance and gift tax revenues were primarily motivated by distributional concerns, but generated low revenues in the post-war period, at around 0.25% of GDP, casting doubt on their effectiveness (du Rietz *et al.*, 2012).

#### Box 5. The rise in top incomes

The share of wealth held by the top decile dropped from 90% in the early decades of the 20<sup>th</sup> century to 53% in 1980, and has increased slightly to 60% in recent years. Both the pre-1980 decline and the post-1980 rise have been due to changes in the top percentile, which has been mainly driven by realised capital gains. Not including realised capital gains underestimates the actual increase in inequality, especially the share of top incomes (Roine and Walderström, 2011). Over 1990-2008, the income share of the top percentile is 40% higher than if they are not included, suggesting that the primary driver of wealth inequality has been the increase in asset prices in the post-deregulation era. Including them leads to a Gini coefficient that is on average 20% higher since 1991 (Statistics Sweden, 2010).

Furthermore, since 1990, there have been many changes to the tax system, leading to average tax rates often lower at the very top than at income levels just below the top (Table 3). This partly reflects the fact that taxes on income from capital, which is a major income source at the top percentile, are relatively low compared to taxes on earnings.

Table 3. Distribution of income and taxes, 2009<sup>1, 2</sup>

Percentile	Total income	Final taxes	Tax rates					Final average tax rate
			Municipal income tax	State income tax	Capital income tax	Real estate tax	Payroll tax	
0–40	117	38	19.7	0	0.4	0.5	14.8	32.3
40–60	332	130	21.5	0	0.2	0.4	21.6	39.2
60–80	431	175	21.9	0	0.3	0.4	22.4	40.6
80–90	548	231	21.8	0.8	0.6	0.4	22.2	42.2
90–95	690	311	21.4	3.3	1.2	0.4	21.9	45.0
95–99	961	467	20.7	6.5	2.4	0.4	21.0	48.6
99–99.9	1 807	911	18.1	9.4	6.0	0.3	17.9	50.4
99.9–100	7 866	3 237	10.8	7.6	13.0	0.2	9.8	41.1

1. Total income and final taxes are in thousand SEK and tax rates in per cent. Percentile rankings based on pre-tax total income.

The "final tax rate" is net of deductions, tax credits and fees, but includes the payroll tax. Sample: all individuals aged 20–64.

2. Taxes, such as VAT, consumption taxes and corporate taxes, not considered here may also have a distributional impact.

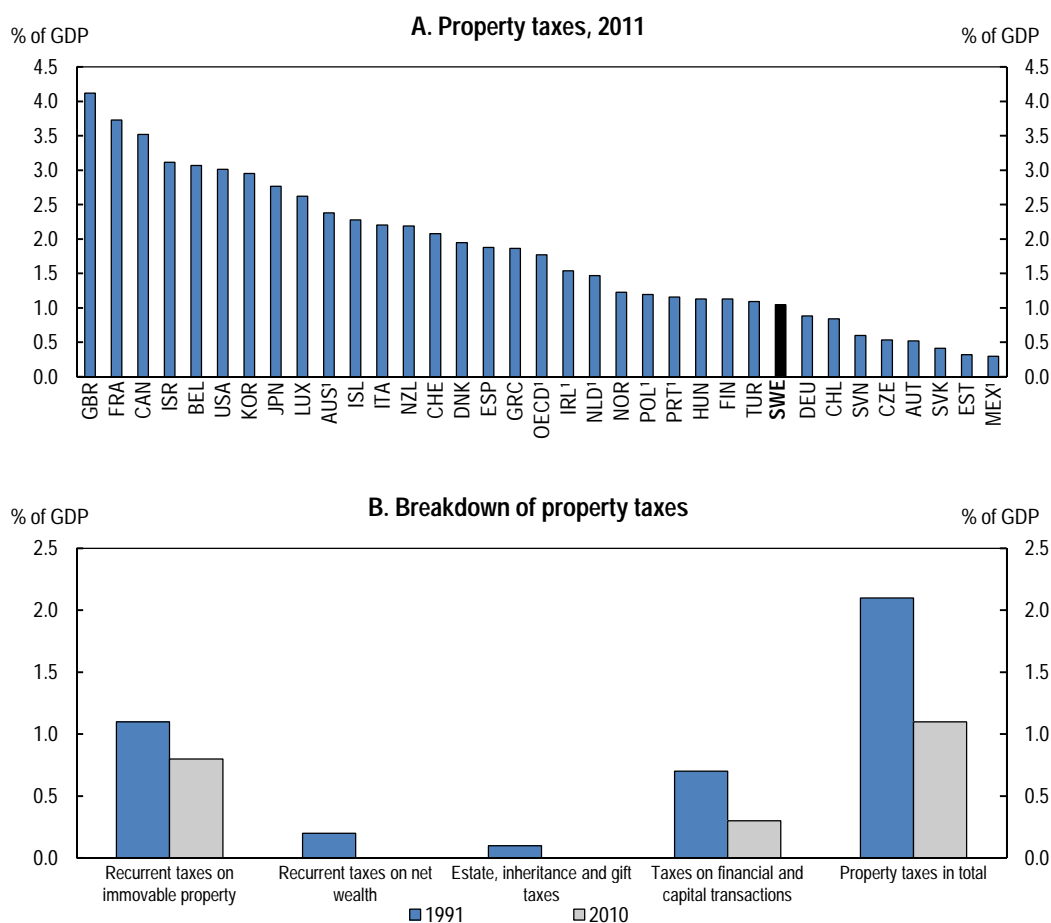
Source: Bengtsson *et al.* (2012).

Capital taxation favours institutional savings and investment in owner-occupied housing, which creates distortions in the allocation of savings and may have adverse effects on long-term growth (Swedish Fiscal Policy Council, 2011). Savings are high in Sweden, mainly because the government and households accumulate considerable assets in pension funds. Housing also absorbs a large part of savings. The concentration of private savings in pensions and property make household balance sheets risky, as these are relatively illiquid assets. Furthermore, as noted above, the preference for savings in pension funds reduces the deposit base and increases the dependence of the financial system on wholesale funding. Finally, favourable tax treatment of pensions and property may have implications for wealth inequality, as top incomes have risen steeply in Sweden in the past two decades, driven mainly by realised capital gains (Box 5). Given the large role of capital gains in the rise in top incomes, it is important to monitor developments in wealth distribution. The abolition of the wealth tax in 2007 has eliminated an important source of data. Hence, getting other sources of wealth information, including that on pension wealth, which constitutes a large part of household wealth in Sweden, should be a priority.

## Property taxation

Property taxes as a share of GDP are low in Sweden in international comparison and changes over the past two decades have resulted in a decline in their overall level (Figure 13). The provision of tax incentives favouring investment in owner-occupied housing, combined with a restricted supply, has contributed to the increase in house prices and household debt whose potential correction could have adverse effects on the economy (Igan and Loungani, 2012). In 2008, the central government tax on property was abolished and replaced by a municipal fee, which is index-linked and adjusted annually. In 2012, the latter amounts to SEK 6 825 per house and per year, with a cap of 0.75% of the assessed property value. For apartments, it stands at SEK 1 365, with a cap of 0.4% of the property value. This change severed the link between the tax and the market value of the property, lowered overall recurrent taxes on immovable property and weakened municipalities' incentives to provide more land for construction. To provide some financing for this, the tax rate on realised capital gains on owner-occupied housing and apartments was raised from 20% to 22% and changes were made to the deferral of capital gains. Despite these new rules on capital gains taxation, the 2008 reform has increased the bias in favour of investing in housing relative to other assets (Sørensen, 2010). This reform was driven by a lack of public support for property taxation and increasing property taxes remains politically difficult.

**Figure 13. Property taxation**

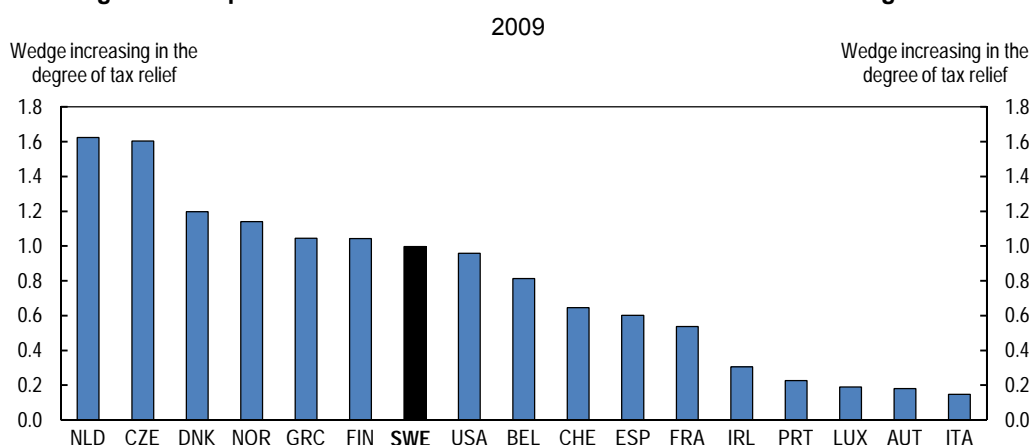


1. 2010.

Source: OECD, *Revenue Statistics*.

Non-neutral taxation of property encourages owning rather than renting, and housing consumption rather than consumption of other goods and services (Figure 14). Shifting the tax structure towards property, which is immobile, would remove some of the incentives to own rather than rent. Together with strict rent regulations, tax incentives have contributed to the rise in house prices. There is some evidence that reducing tax subsidies for mortgage payments can improve the resilience to housing boom-bust cycles (Crowe *et al.*, 2011). Linking the assessment value to the market value may also increase incentives for developing land as low taxes on vacant property and undeveloped land can encourage under-utilisation of land, which may lead to a reduced supply of land for housing, especially in urban areas (Arnold *et al.*, 2011). A higher rate of recurrent taxation of the market value of residential property could also be used to reduce taxes on real estate transactions, thereby improving labour mobility.

**Figure 14. Gap between market interest rate and after-tax debt financing cost<sup>1</sup>**



1. This indicator takes into account if interest payments on mortgage debt are deductible from taxable income and if there are any limits on the allowed period of deduction or the deductible amount, and if tax credits for loans are available. For countries that have no tax relief on debt financing costs, this indicator takes the value of zero.

Source: Calculations based on OECD Housing Market questionnaire.

A regime that taxes imputed rent from owner occupation, making allowance for maintenance costs, while providing a full deduction for mortgage interest costs would provide neutral property taxation. However, this may result in higher administrative and compliance costs and given the difficulty in implementing such a regime, and in particular of assessing imputed rent, such a policy is not widely used. A property tax can be thought of as a substitute, if it is assumed that the value of the property, the tax base, is proportional to the flow of imputed rent. Alternatively, abolishing mortgage interest relief would improve the uniformity of the tax system, although it would be second best. Given the lack of public support, any change to property taxation would best be made gradually.

Shifting the tax mix from personal and corporate income taxes towards recurrent taxes on immovable property should raise economic growth. However, there could be a trade-off with the income distribution objective since personal income taxes are progressive while real estate taxes in place in OECD countries often absorb a larger share of the income of poorer households (OECD, 2012c). Targeted transfers, however, can reduce the severity of this trade-off. The cutting back of tax expenditures that mainly benefit high-income groups, such as tax relief on mortgage interest, and regular updating of property valuation would strengthen the progressivity of taxation (Arnold *et al.*, 2011; OECD, 2012d). To ease the increase in real estate taxation, special arrangements could be made to reduce the liquidity constraints that the tax may imply for those with low incomes and illiquid assets. The 2007 OECD Economic Survey offered recommendations on alternative mortgage tools to address these types of households, who are mostly pensioner homeowners.

### ***Financial capital taxation***

The taxation of capital income favours institutional savings: the tax rate on imputed returns on institutional financial savings (managed by pension funds and life insurance companies) is 15%, as against the 30% on the return to other financial savings. While there is dispersion in the tax rates of different types of savings, Sweden is among the few OECD countries that tax both pension scheme benefits and pension fund earnings. The imputed rate of return is applied on the value of the net assets held by pension funds and life insurance companies at the start of the year and is the average nominal interest rate on long-term government bonds in the previous year. The lower tax rate tends to distort portfolios towards institutional savings, with potential negative impacts on investment. Furthermore, the contributions to pension schemes mandated by collective bargaining agreements are exempt from ordinary social security tax and are subject to a reduced wage income tax, lowering the effective tax rate on pension savings for high-income earners. Finally, pensions are taxable, while contributions to pension schemes are deductible, lowering the effective tax rate on the return to pension savings to the extent that the marginal income tax at the time of contribution is higher than the marginal tax rate when the pensions are received.

Favourable tax treatment of pensions may be motivated by an objective to increase total savings for the whole population or to provide incentives for those who would not have saved at all for retirement. The pension system rests on three pillars: public pensions, mandatory occupational pensions and individual private pensions. The public pension system is a so-called notional defined contributions system that has an automatic link between benefits and demographic and economic developments to ensure the system remains balanced. However, this system may also lead to a substantial fall in pension incomes. Occupational pension plans, based on collective agreements between the unions and employer confederations and covering 90% of employees, have been expanding, fuelling the accumulation of assets by households.

For the tax system to promote overall household savings, a low uniform tax rate on all forms of private savings is the best solution. However, total savings are not low in Sweden and tax subsidies to institutional savings may only reallocate savings rather than increasing the overall savings level (Bergström *et al.*, 2010). By removing these tax subsidies, it would be possible to lower the tax rate on other financial savings. This would boost total tax revenue without reducing the average after-tax return of aggregate financial savings (Sørensen, 2010). It could be argued that favourable taxation of pension saving helps to address the lower replacement ratio from public pensions for above-average wage earners due to the income ceiling in the public system. However, the mandatory nature of contributions to these private pensions is the best way to serve this objective and contribution rates could be changed if pension saving appears to be insufficient.

The reform of the pension system starting in 1994, which included the conversion from a defined benefit to a notional defined contribution system and an increase in the role of occupational pensions, might have favoured high and stable income earners. Occupational pensions are more important for high-income earners since they not only provide a pension as supplement to the public system, but also pension compensation for incomes above the public system pension ceiling earners (Palmer and Wadensjö, 2004). Evidence that better-off households benefit more from the design of the pension system, without saving more overall, suggests that tax incentives for institutional savings could lead to distortions (Bergström *et al.*, 2010). A more extensive investigation of which people participate in the tax-favoured pension scheme and the impact of the taxation of institutional savings on their total saving would be useful.

Revising the taxation of assets to make the tax system simpler and more neutral and transparent would improve the allocation of saving and investment. Since the main distortion comes from the reduced tax rate on the imputed rate of returns on institutional savings, one option to make taxation of financial savings uniform is to reduce the gap between the tax rate on pension savings and that on other financial assets.

The Budget Bill for 2013 includes a reduction in corporate taxes from 26.3% to 22% starting in January 2013, bringing it below the OECD average of 25.5%. Corporate income taxes affect investment and growth. A cut in the corporate tax especially benefits productivity growth of the most innovative firms. Furthermore, relying less on corporate income taxes relative to personal income taxes, taxes on consumption and recurrent taxes on residential property could increase efficiency. However, as the corporate tax rate is well below the top personal income tax rates, it might lead to tax evasion by high-income individuals who will attempt to shelter their savings within corporations (Arnold *et al.*, 2011). In Sweden, there is some evidence of income shifting from labour to capital due to the difference in marginal tax rates on capital and labour income, especially by high-income individuals, contributing to after-tax inequality (Alstadsæter and Jacob, 2012). Thus, the effects of the new tax reform on all tax bases should be evaluated to see if it exacerbates the problem of income shifting.

## Conclusions

Despite a strong macroeconomic and financial performance over the past two decades, Sweden faces vulnerabilities going forward. Box 6 sets out this paper's main recommendations to ensure growth remains sustainable and resilient. As a small open economy, highly exposed to international turbulence, Sweden should continue to carefully monitor potential internal imbalances, notably with respect to household indebtedness and housing prices. Tackling the structural problems in the housing market and altering the tax system to improve the allocation of savings would lead to a more efficient housing market and help guard against imbalances that may impede future growth. Monitoring household indebtedness and enhancing financial stability to improve the resilience of the banking system would help limit the economic, fiscal and social costs that could arise in the event of external or internal shocks. These reforms would not only address short-run risks, but also contribute to providing a sound framework to make sure growth remains sustainable in the long run.

### **Box 6. Key recommendations on housing, financial stability and capital taxation policies**

#### **The housing market and household indebtedness**

- Phase out the restrictions on apartment rentals, including on buying an apartment to rent it out. Continue to phase out rent controls so as to more closely align rents with market values.
- To reduce supply rigidities in the housing market, streamline building requirements across municipalities and ease the process of setting up cooperatives. Enhance the access of small and foreign firms to the public procurement process by improving its timeliness, predictability and clarity.
- Monitor closely the effects of the loan-to-value cap and the characteristics of households that use variable-rate and non-amortised loans. Introduce binding measures to ensure sound underwriting practices for non-amortised and variable-rate loans.

#### **Financial stability**

- Consider introducing a leverage ratio as a backstop to the risk-weighted capital measures. Continue to closely monitor banks' progress in reducing their wholesale funding dependence and further improve their liquidity reporting framework.
- Address gaps in the macroprudential toolkit to supervise and influence financial institutions. Clarify the role of and relationship between the Riksbank, the Financial Supervisory Authority, the National Debt Office and the Ministry of Finance.
- Change the Stabilisation Fund to target a size that reflects that of the banking system and a fee structure based on risks.
- Introduce a transparent bank resolution scheme as soon as is feasible, consistent with European Union developments.

**Capital taxation**

- Move towards more neutral taxation across types of assets. In particular, to tax owner-occupied housing like other assets, a tax on imputed-rent would be first best. A property tax based on market value could proxy imputed-rent taxation. Alternatively, abolish mortgage interest deductibility.
- Evaluate further which people benefit most from the lower tax rate on institutional savings and how the taxation of institutional savings affects their total saving. Consider reducing the gap between the tax rate on pension savings and that on other financial assets.

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