ASSET PRICES

Figure B3. Price index for owner-occupied housing (1976=100) and Stockholm Stock Exchange share price index (end 1979=100).

Note. Month-end share prices.

Sources: Statistics Sweden and Stockholm Stock Exchange.

What is the relevance of asset prices for a central bank? The prevailing but not unanimous view today is that an increase in asset prices can lead to higher aggregate demand for goods and services and thereby contribute to stronger inflationary pressure. Three mechanisms are involved: the wealth effect, Tobin's *q* and the financial accelerator.

Wealth effects arise in that, to fulfil a given savings target, consumers do not have to save as large a proportion of income because the capital gains add to their wealth; this leaves more income than before for consumption.

Tobin's q is the ratio of an asset's market price to its replacement cost. If an increase in asset prices brings their market value above the replacement cost, it will be profitable to invest in real capital because each invested unit has a higher value in the market. When assessing the effects on inflation it must be borne in mind that besides adding to demand, investment in real capital raises total production capacity.

Higher asset prices reinforce the balance sheets of firms as well as households. Borrowing is facilitated in that assets which can be used as loan collateral for investment or consumption are worth more. This is usually referred to as the *financial accelerator*. An upward economic phase gets an extra driving force in that credit is easier to obtain.

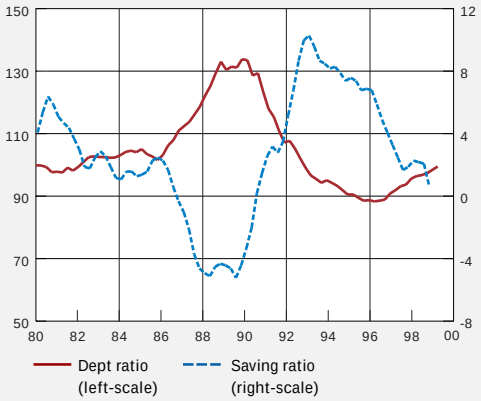
So how have asset prices moved in recent years? Since the mid 1990s, share as well as house prices have risen strongly (Fig. B3). The level of house prices is now higher than before the drop in the early 1990s. The stock market correction in connection with the international turbulence in financial markets in the autumn of 1998 has been followed by a strong recovery.

To what extent can rising asset prices influence general economic development? Many observers consider that the strong stock market trend in the United States has been an important factor behind the consumption-driven activity in the US economy. The exceptionally low saving by American households in recent years may be an indication that wealth effects are considerable. In Sweden, too, the strong path of asset prices may have led to decreased saving and higher consumption via wealth effects. The saving and debt ratios (the latter represented by total liabilities relative

to disposable income) for Swedish households are shown in Fig. B4.[17] The increase in asset prices in recent years has been accompanied by a marked decline in the saving ratio, which could be a sign of wealth effects. However, the saving ratio is not as low as before the crisis in the early 1990s, when the price bubble in the property market was sustained by a massive accumulation of debt, as can be seen from the path of the debt ratio in the late 1980s. The debt ratio peaked at about 135 per cent of disposable income. The debt ratio has been moving up since the mid 1990s but the accumulation of debt has not been as dramatic. Neither is total lending to households rising as rapidly as in the late 1980s. Important forces behind the growth of lending at that time were no doubt an accumulated borrowing requirement after many years with a regulated credit market, advantageous tax allowances for interest expenditure and unsophisticated credit assessments by Swedish banks and house mortgage institutions. The combination of high inflation and the tax system at that time also meant that debt was rapidly eroded as its real value decreased. Tax effects were such that in practice the real rate of interest was often even negative (Fig. 33).

The real effects of an increase in wealth are difficult to assess. Research suggests that the effect of an increase in stock market wealth may be greater in the United States than in a number of European countries. For the United States, a wealth increment of one dollar is estimated to raise consumption one year ahead by between 3 and 7 cents.[18] Calculations at the Riksbank indicate that a stable relationship between changes in wealth (financial as well as real) and consumption is difficult to find in Swedish data. The impact of rising share prices on consumption is presumably smaller in a country were shares make up a smaller proportion of total wealth. But the relationship may have become

Figure B4. Swedish households' debt and saving ratios. Per cent



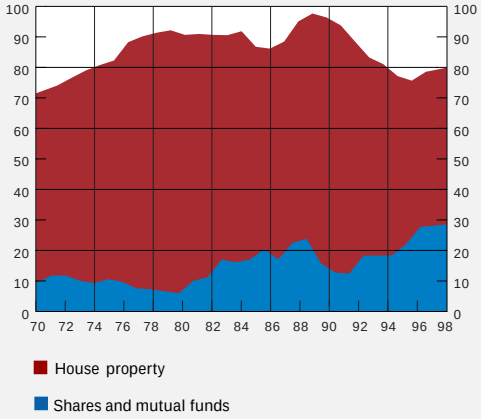
Note. The definition of saving is taken from the earlier national accounts.

Sources: Ecowin and the Riksbank.

17 If labour market insurance is included, the level of the saving ratio in Sweden is about 3 percentage points higher, see Berg, L. (1999), *Sparande, investeringar och förmögenhet—en analys med inriktning på sammansättning och förändring av hushållens sparande och förmögenhet* (Saving, investment and wealth—an analysis focused on composition and changes in the household sector), study on behalf of the Financial Markets Inquiry.

18 Starr-McCluer, M. (1998), Stock market wealth and consumer spending (mimeo), Federal Reserve Board of Governors, and Boone, L, Giorno, C, & Richardson, P. (1998), *Stock market fluctuations and consumption behaviour*, OECD Economics Department Working Paper 208. Approximately the same magnitude of wealth effects from capital gains has been found in Swedish data for 1954–86 by Berg, L. (1988), *Hushållens sparande och konsumtion* (Household saving and consumption), Allmänna Förlaget, Stockholm.

Figure B5. Owner-occupied and cooperative housing and holdings of shares and mutual funds as proportions of total household assets. Per cent



Note. There are no complete statistics on the components of household wealth; the basis here is Spring Bill estimates by the Ministry of Finance.

Sources: Ministry of Finance, National Institute of Economic Research and Statistics Sweden.

successively stronger in that this proportion has risen in Sweden (Fig. B5). But shares still make up a proportion of total wealth that is considerably smaller than housing assets.

Estimates at the Riksbank suggest that wealth effects from property values are stronger than from financial assets. There is a risk, however, that much of this result is explained by one-off effects from the deregulation of the Swedish credit market, which makes it difficult to draw far-reaching conclusions. Earlier studies on the relative importance of real and financial wealth for consumption have reached various conclusions.[19]

Tobin's q (the relationship between market price and replacement cost) seems to be of some importance for manufacturing investment, according to another Riksbank study.[20] This implies that the recent stock market trend should have positive effects for investment as well as consumption.

The financial accelerator, which acts via the credit market and the balance sheets of firms and households, has been studied empirically to date, in Sweden as well as elsewhere, to a considerably smaller extent than the other two mechanisms. But this accelerator could turn out to be at least as important, not least for explaining dramatic developments when asset markets collapse. A steep fall in asset prices can have serious consequences not only for economic activity but also for financial system stability. In addition to their responsibility for monetary policy, which tends to attract most attention, central banks have the function of safeguarding financial stability, directly or indirectly. For the Riksbank, an expression of this function is the Financial Stability Report, in which the Riksbank's assessment of risks in the banking sector and the payment system are presented twice a year.

Even if monetary policy chooses to regard asset prices, in the context of the inflation target, primarily as a driving force behind aggregate demand and thereby ultimately behind inflation, there are problems that have to be faced. As we have seen, determining the average impact of asset prices on demand and thereby on forecast inflation is not a trivial matter. Moreover, the effects of asset price movements on

19 See e.g. Kanis, A. & Barot, B. (1993), *On determinants of private consumption in Sweden*, National Institute of Economic Research Working Paper 34, and Markowski, A. (1994), *Private consumption expenditure in the econometric model Kosmos*, ibid. No. 44.

20 See Assarsson, B., Berg, C. & Jansson, P. (forthcoming), *Investment in Swedish manufacturing: analysis and forecast*, Sveriges Riksbank Working Paper series.

demand and inflation may vary over time. So increased asset prices need not necessarily contribute to stronger inflationary pressure in every case. The decisive factor is what the asset price increase has been caused by. For example, if the fundamental factor behind the price rise is higher expected profits on account of an improvement in productivity, this need not lead to higher inflation. On the contrary, it may contribute to a future price trend that is more subdued because potential growth has been enhanced.