ARTICLE – Distributional effects of the Riksbank's measures

Monetary policy always affects the distribution of income and wealth in various ways, regardless of whether this concerns adjustments of the policy rate or of purchases of various assets. At the same time, it is difficult to determine how large the distributional effects are, among other reasons because these differ over the short and long terms. It is also difficult to determine the direction of the effect – an expansionary monetary policy contributes to both rising asset prices and higher employment, which has counteracting distributional effects. It is not evident in practice which of these effects will be predominant. It is obvious that, without the major contributions made by monetary policy in the coronavirus crisis, growth and employment would have fallen even more and unemployment would have been even higher. Such a development would have been unfavourable for all households, particularly those with the lowest incomes and wealth. It is important to follow how the distribution of income and wealth changes going forward. This can, for instance, have an impact on the effect that monetary policy has on economic activity. However, monetary policy is not very well suited to use for redistribution purposes and neither is this the Riksbank's task. Other policy areas have greater opportunity to take targeted measures to counteract undesirable distributional effects.

Monetary policy has managed three crises in just over ten years

In the last decade or so, three dramatic events have impacted the global economy: the financial crisis of 2008–09, which transitioned into the so-called eurozone crisis 2010–2012, and the coronavirus crisis of 2020. These events have led economic policy around the world to focus, to a great extent, on crisis management. Central banks and governments have had to focus on restoring order in turbulent financial markets to ensure credit supply functions and, as far as possible, reducing the depth of the economic downturn resulting from the crises. In addition, the period between these crises included further challenges for monetary policy in many places. The consequences of this are that central banks have cut their policy rates to very low levels and have conducted major programmes for the purchase of securities to put further downward pressure on interest rates.

At the same time, these extensive and long-term initiatives and the fact that the measures were implemented on individual markets for securities has meant that the possible side-effects of monetary policy have started to be discussed to a greater extent than before the financial crisis, both abroad and in Sweden. Among other things, the effects of monetary policy on the distribution of income and wealth has received more attention.[32]

The issue of the distributional effects of monetary policy forms part of a broader discussion of why the income distribution in many OECD countries has become more uneven since the 1980s.[33] Conceivable explanations that have been proposed include structural transformations such as globalisation, in which the gains from increased trade, production, technology and capital flows between countries have fallen to certain groups to a greater extent than to others. At the same time, institutional factors also seem to have been important, such as the deregulation of markets, reforms of tax and social insurance systems, and changes on the labour market as well as the demographic structure of the population, for example. However, the extent of the distribution effects of these factors has differed from country to country.[34]

Monetary policy affects the distribution of income and wealth, but the net effect is uncertain

Monetary policy always affects the distribution of incomes and wealth in different ways. This holds true regardless of whether the monetary policy primarily entails adjustments of the policy rate, which was the case from the 1990s up until the financial crisis, or whether it concerns purchases of various assets, which has become a common tool recently. When the Riksbank works to change interest rates through different channels, this has effects that change the conditions for the decisions by economic agents. Ultimately, it affects output, employment and inflation, which is the aim of monetary policy. But as households have savings of different sizes, own different assets and have different statuses on the labour market, monetary policy will also affect the distribution of income and wealth.

When discussing the distributional effects of monetary policy, it is also important to bear the time perspective in mind. Over a longer period, including both an economic downturn and an upswing, the total effect becomes smaller, as monetary policy first becomes more expansionary and then less expansionary. The effects on the income and wealth distributions will then largely cancel one another out.[35]

[32] More details can be found, for example, in the speech by H. Ohlsson, "The distributional effects of monetary policy", 7 April 2017, Sveriges Riksbank.

[33] However, it is not clear that 1980 is the fairest reference point. For example, longer comparisons show that the income inequality is now approximately the same as in the 1960s; see, for example, A. Lindbeck, "Fenomenet Piketty" (The Piketty phenomenon), Ekonomisk Debatt 7, 11–20, 2014.

[34] For more information on the details of the global development of income distribution and the empirical evidence for conceivable explanations, see, for example, B. Keeley, "Income Inequality: The Gap between the Rich and the Poor", OECD Insights, 2015 and F. Bourguignon, "World changes in inequality: an overview of facts, causes, consequences and policies", BIS Working Papers No 654, Bank for International Settlements, 2017.

[35] One common starting point is that monetary policy in the really long term has minor or no effects on growth, employment and other components of the real economy, such as income distribution.

In addition, it is not really fair to compare the distribution before a monetary policy measure with the distribution after this measure has been implemented. For example, if the Riksbank decides **not** to react, for example to a downturn in economic activity, this will also have effects on the income and wealth distributions. Ideally, therefore, a comparison should be made between the distribution following a monetary policy measure and the hypothetical situation in which the measure was **not** taken, which is, of course, difficult in practice.

It is therefore a complicated matter to calculate exactly which effect the Riksbank's measures have had on the distribution of income and wealth. It is not even obvious in which direction monetary policy has affected the distribution.

An expansionary monetary policy contributes to rising asset prices

Lower interest rates affect households' capital income, saving in various assets and their liabilities. Indebted households benefit from lower interest payments, all other factors being equal. This applies in particular to households with large variable-rate loans. At the same time, interest incomes become lower, which disadvantages households with relatively large bank savings and those with relatively many interest-bearing assets. At the same time, the Riksbank's measures to hold down the level of interest rates, both via the policy rate and the purchase of assets, contributes to prices for various assets increasing. This means that the wealth will increase among households who own the assets and their incomes will also become higher when they sell their assets. In this way, demographics also play a role, partly as the size of the savings and ownership of, for instance, homes have a natural link to age structure.

In general, capital income has the greatest significance for the households with the highest incomes, particularly those at the very top of the distribution. This also applies to wealth, in that equities and similar financial assets are concentrated in the households with the greatest wealth.[36] Real assets such as houses and tenant-owned apartments are certainly more evenly distributed among households, but rising prices for tenant-owned apartments, taken together, seem to have contributed to the more uneven distribution of wealth in Sweden after the financial crisis.[37]

However, an expansionary monetary policy also supports employment

However, the expansionary monetary policy has not just contributed to rising asset prices, but has also contributed to a stronger labour market, to inflation closer to the inflation target and – during the crises – to a smaller fall in economic activity than

[36] This applies to households' personal wealth. If the consolidated assets owned by households via the pensions system are also included, the distribution becomes more even.

[37] J. Lundberg and D. Waldenström, "Wealth inequality in Sweden: What can we learn from capitalized income tax data?", Review of Income and Wealth 64(3), pp. 517–541.

would otherwise have occurred. This also creates distribution effects. More specifically, higher employment has contributed to the income distribution, and possibly also the wealth distribution, having become more even than would have been the case had monetary policy not been so expansionary.[38]

For most households, earned income accounts for the largest share of income, meaning that changes to wages and the number of hours worked have great significance for the income distribution. In Sweden, it is primarily the difference between incomes for those who have a job and those who do not that is significant, rather than the wage differences between those who work. Households with incomes from unemployment insurance, sickness benefit, activity compensation and other forms of financial support are primarily found in the lowest part of the income distribution. In addition, having a job affects the size of the pension received from the public pension system and whether one has access to a contractual pension. If one includes this type of pension asset in household wealth, an expansionary monetary policy contributes to a more even economic distribution.

Mixed results from research into the effects of monetary policy on the income and wealth distribution

Through different measures to change the level of interest rates, which, in turn, affect the economy as a whole, monetary policy thus affects the distribution of income and wealth through various channels. Some of these channels have distribution effects that counteract each other, like those going through various asset prices and the labour market. It is therefore difficult to say in advance what the overall effect will be, and this ultimately becomes a matter for empirical research to determine. However, studying this question is linked with a number of practical difficulties, including the time aspect, as mentioned earlier. Another complication is that the effects via several different channels need to be studied simultaneously. Relevant details of household income and wealth may also be missing. This applies very much to Sweden, where studies of the wealth distribution have been impeded by the fact that information on individual households' assets and liabilities is no longer collected. The Riksbank has pointed out that it is important that this lack of data is remedied as soon as possible, see for instance Financial Stability Report 2020:2.

A survey of the research existing around the distributional effects of monetary policy reveals, among other things, that there are relatively few studies that specifically address the effects of other central bank measures than adjustments of the policy rates.[39] In itself, this is not so strange, as major asset purchases, for example, started

[38] Changes of inflation also have distributional effects, as this affects the real value of assets and liabilities, for example. Comparatively, however, this was of greater importance before the inflation targeting policy was introduced, when inflation was high and varied greatly. Large and unexpected redistributions could then take place, for example between highly-indebted households and those with large savings, from year to year.

[39] The conclusions below come from the survey of the research in the article by A. Colciago, A. Samarina and J. de Haan, "Central Bank Policies and Income and Wealth Inequality: A Survey", Journal of Economic Surveys, 33(4), pp. 1199–1231, 2019.

relatively recently. In addition, most studies only focus on a few of the different channels through which monetary policy affects the distribution. Given this, and that the studies focus on different countries and use different methods, it is not surprising that the results prove to be mixed; some studies show that lower interest rates contribute to a more even income distribution, while others reach the opposite conclusion. The results of the few studies of central bank asset purchases are also mixed, with some finding that the distribution becomes more even, some that it becomes more uneven and some that the overall distribution effect of asset purchases is close to zero. The same thing applies to the effect of monetary policy on the wealth distribution.

Income distribution in Sweden has become more uneven since the early 1980s

Even if it is difficult to calculate the effect of monetary policy specifically, it is important to study the way in which the distribution of income and wealth changes over time. This is relevant for central banks, for instance, because it can impact the effect that monetary policy has on economic activity.[40] The most common way of studying the distribution is via what is known as the Gini coefficient, which is a measure of the spread of incomes, for example, between households. The measure is designed so that the coefficient is zero if the distribution is completely even, which is to say if all households have the same income. If the situation is the opposite and one single household has all the incomes, the coefficient has the value of one.

Figure 50 shows how the Gini coefficient for disposable incomes in Sweden has changed since 1995, where disposable income is the sum of work and capital incomes and various types of transfer, minus taxes. The figure also shows the Gini coefficient for disposable incomes including capital gains (and losses), which is to say gains from price rises for housing, equities and other assets realised when they are sold. These gains are sometimes included in studies of the income distribution. However, they are associated with measurement problems and complicate income comparisons over time, as the gains can vary heavily from year to year.[41]

The spread of incomes declined during the 1960s and especially during the 1970s. At the beginning of the 1980s, however, the spread began to increase. Figure 50 shows that the trend towards a more uneven income distribution has continued for the past twenty-five years.[42] There has been some variation over time, however. For example,

[40] See the reference in the previous footnote for further details.

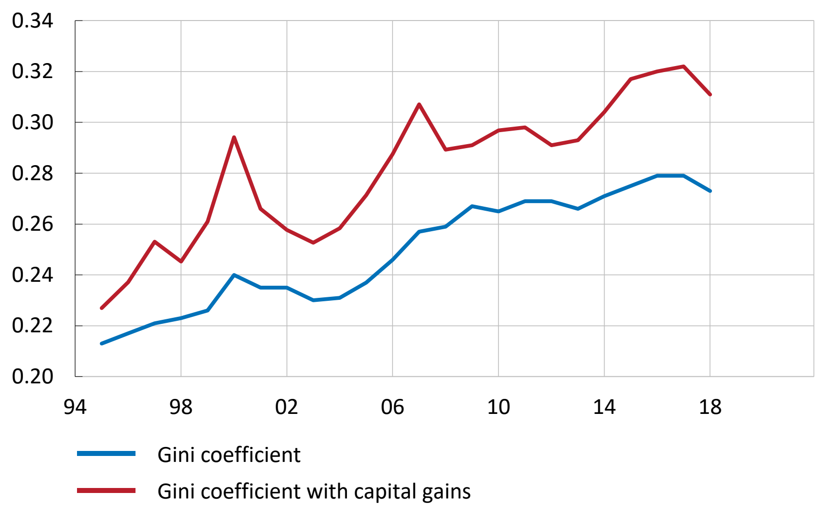
[41] For more on the measurement problems with capital gains and the significance of capital gains for the income distribution in general, see "Kapitalinkomster och inkomstfördelning" (Capital gains and income distribution), appendix 3 of Långtidsutredningen (Long-term survey of the Swedish economy) 2019, SOU 2019:62. Statistics Sweden's official income statistics include realised capital gains, which are also included in the Government's accounts of the distributional effects of policy.

[42] Data limitations make it difficult to create a cohesive series for the Gini coefficient prior to 1995. However, the existing data indicates that the trend started in the 1980s. This is also supported by other measures of distribution. More details on how the income distribution has changed can be found in Huvudbetänkande av Långtidsutredningen 2019 (Main report from the Long-term survey of the Swedish economy), SOU 2019:65, D. Waldenström, "Perspektiv på den ekonomiska ojämlikheten i Sverige" (Perspectives on economic inequality), Ekonomisk debatt 4, 2020 and Distribution policy account, appendix 3 of Budget

the distribution was relatively unchanged in the years directly following the financial crisis of 2008–09, but the Gini coefficient started to increase again in 2014. However, this trend was broken again in 2017, when the distribution was almost unchanged, and in 2018 – the last year for which there are statistics – the difference in incomes between households fell.

Figure 50. Gini coefficient for disposable household income

Gini units



Note: The calculations are based on Statistics Sweden's surveys Household finances (HEK) 2005–2012 and Income and tax statistics (IoS) 2013–2018. The calculations take account of the varying compositions of different households.

Source: Statistics Sweden.

One of the main explanations why the spread in incomes has continued to increase is that differences in income between those not in employment and those with work incomes have grown. Among other things, this is due to demographic changes, income tax reforms, and transfers not having increased at the same rate as average incomes.[43] Another important explanation is that capital income have increased at the top of the income distribution, particularly at the very top. This is primarily an effect of rising incomes from interest and dividends, particularly dividends from close companies, which, to a certain extent, can be linked to more favourable tax regulations for such companies. If capital gains are included, incomes at the top of the income distribution have pulled ahead even more. In recent years, these gains have primarily come from sales related to property.

What will happen to the income distribution in the period ahead? The most recent Long-term survey of the Swedish economy, LU 2019, focused on economic inequality and, among other things, presented scenarios for the evolution of the income distribution until 2035, given population forecasts and assumptions for the development of

Bill 2021, government bill 2020/21:1. See also the articles in "Increasing Income Inequality in the Nordics", Nordic Economic Policy Review 2018.

[43] However, some of these changes have probably also contributed to increasing employment and growth over the period.

the economy as a whole. The results varied slightly, but all scenarios indicated that income disparities between households would increase in the period ahead. For natural reasons, however, the calculations in the Long-term survey of the Swedish economy were made without knowledge of the coronavirus pandemic. It is not clear how the deep economic slowdown has affected the income distribution but the increased unemployment itself is contributing to a greater spread in household incomes.[44]

Without the monetary policy measures, unemployment would have increased further

The years before the coronavirus crisis were largely characterised by strong economic activity in which employment showed a trend increase and unemployment fell towards the level prevailing before the financial crisis. Employment among people with a vulnerable position on the labour market according to Arbetsförmedlingen, including people born outside Europe, also increased, albeit from a low level. The expansionary monetary policy contributed to this, which thus had a levelling distributional effect that counteracted the effect of the rising asset prices.

During the coronavirus crisis, monetary policy has involved implementing measures to keep interest rates low and ensure that the credit supply continues to function despite the consequences of the pandemic. This contributes to alleviating the effects of the crisis and creates the right conditions for a more rapid economic recovery. The way the economy is designed, it is natural that monetary policy measures are aimed at and go through the financial sector, even if the aim of the measures is to support the real economy. It is obvious that, without the major contributions during the coronavirus crisis, growth and employment would have fallen even more and unemployment would have been even higher. Such a development would have been unfavourable for all Swedish households, particularly those with the lowest income and wealth.

It is important to follow how the distribution of income and wealth changes. This can, for instance, have an impact on the effect that monetary policy has on economic activity. But as monetary policy affects the economy broadly and has distribution effects that partly counteract each other, it is poorly suited to use for redistribution purposes. And nor is this the task of the Riksbank; these considerations must be made by elected officials.[45] Other policy areas have greater opportunity to take targeted measures to counteract undesirable distributional effects.[46] It is also important to remedy structural problems that create distributional effects that benefit those who are established, for instance on the labour and housing markets, while other groups that find it difficult to get into these markets are disadvantaged.

[44] SeeAppendix 3 of Budget Bill 2021, government bill 2020/21:1.

[45] See, for instance, Chapter 18 of the Riksbank Committee's final report, "A new Sveriges Riksbank Act", SOU 2019:46.

[46] Discussions of and proposals for such measures can be found in L. Calmfors and J. Roine, "Introduction", Nordic Economic Policy Review 2018, pp. 6–16 and F. Bourguignon, "World changes in inequality: an overview of facts, causes, consequences and policies", BIS Working Papers No 654, Bank for International Settlements, 2017.