

Svein Gjedrem: History of economics in Norway

Schweigaard lecture by Mr Svein Gjedrem, Governor of Norges Bank (Central Bank of Norway) at the University of Oslo, Oslo, 23 August 2010.

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Dear students and other attendees

Allow me to start by thanking you for the invitation to give the Schweigaard lecture for new students and others at the Department of Economics at the University of Oslo. Rather than reminisce about my days as a student, I will talk about the subject you will be studying and the economy which you will be using your knowledge to understand.

The world has just witnessed the most severe economic crisis since the 1930s. Many countries that were affected by the crisis appear to be recovering. Continued turbulence in international financial markets is nevertheless fuelling uncertainty about developments ahead. The prospects for Europe are particularly uncertain. Many countries are struggling with high public debt and low confidence. A number of countries are forced to make substantial cuts in welfare spending and raise taxes.

The financial crisis started with problems in the US subprime mortgage market. There were few, if any, observers who foresaw that problems in a small segment of the US housing market could result in such dramatic consequences for economic developments throughout the world. Economists, politicians and most people have in its wake asked how this could happen.

It may be that the desire to understand has led to a rising number of young people who want to study economics. That would be a positive effect of the crisis.

Why study economics? The British economist Arthur Cecil Pigou once noted what he considered to be the true purpose of economics in society:

“The complicated analyses which economists endeavour to carry through are not mere gymnastics. They are instruments for the bettering of human life. The misery and squalor that surround us, the injurious luxury of some wealthy families, the terrible uncertainty overshadowing many families of the poor – these are evils too plain to be ignored. By the knowledge that our science seeks it is possible that they may be restrained. Out of the darkness light! To search for it is the task, to find it perhaps the prize, which the “dismal science of Political Economy” offers to those who face its discipline”.¹

Most of us may find these words rather grandiloquent. Economics is a subject that makes positivistic attempts to explain the interaction between firms, households and government. But the subject can also in more normative terms be used to indicate how society and markets should be organised.

It took many years for economics to gain its own department at the University of Oslo. In the 1800s, political economy, as it was called at that time, was initially placed under the faculty of law. It was not until 1932 that the University Institute of Economics was established as a department in its own right.

Many attempts have been made to define economics. In the 1930s, the British economist Lionel Robbins stated that:

¹ In Agnar Sandmo (2006): “Samfunnsøkonomi – En idéhistorie (Economics – a history of ideas)”, Universitetsforlaget, p. 224.

*“Economics is the study of the use of scarce resources that have alternative uses”.*²

This definition may seem rather abstract – and does not perhaps capture aspects of the subject that are important today. To illustrate the breadth and application of the subject, an alternative may be to list some of the questions that an economist can contribute to elucidating or provide a decision-making basis for. The issues of relevance today may for example include the following:

- Is it economically profitable to build a power line through Hardanger? How should we weigh the value of untouched nature against the cost of using alternative power supply systems?
- How can CO2 emissions be reduced while minimising the impact on living standards and employment? While engineers have valuable knowledge about the technological aspects, economists can analyse how pricing and taxation can be used to reduce emissions
- What are the consequences of increasing oil revenue spending in Norway? Over the past 10–20 years, a theme at the forefront of economic policy debate in Norway has been how fast we should spend petroleum revenues. Both gas and oil are non-renewable resources and this places the management of these resources in a particular position. How can we ensure that many generations benefit from this wealth? What structural changes will occur in the domestic economy if we increase petroleum revenue spending?
- What were the causes of the financial crisis? How can we prevent history from repeating itself?
- How can the authorities promote sound and stable economic growth and the efficient use of society’s resources?

The last question has been the subject of debate for centuries. The prevailing view has shifted over time. Crises and recessions have often spurred new recognitions and new thoughts.

Anton Martin Schweigaard, the lawyer and economist who has given this lecture its name, has been referred to as “the champion of 19th century economic liberalism in Norway”.³ Schweigaard taught statistics and economics at the University of Oslo from 1836 and was a staunch advocate of free trade.

The Scottish moral philosopher Adam Smith laid the conceptual foundation for economic liberalism in his book *The Wealth of Nations*. According to Adam Smith, economic decisions should be left to individuals. Market forces, or “the invisible hand”, should be allowed to function. Economic liberalism was a reaction to the prevailing mercantilist doctrine of the time, where state control by means of tariff protection, monopolies and other privileges was aimed at promoting certain industries. Schweigaard also strongly criticised government control:

² In Agnar Sandmo (2006): “Samfunnsøkonomi – En idéhistorie (Economics – a history of ideas)”, Universitetsforlaget, p. 13.

³ Wilhelm Keilhau quoted in Halvor Mehlum (2008): “Samfunnsøkonomen Schweigaard (The economist Schweigaard), Memorandum No 20/2008”, Department of Economics, Oslo University, p. 5.

“There is hardly a trace of the multitude of unnatural industrial plants that it wanted to promote. That is how powerless we are when we seek to determine the law of nature rather than follow its prescriptions.”⁴

The ideals of free competition and a passive state predominated up to World War I, even though not everyone shared this view. The radical German economist and philosopher Karl Marx believed that competition and big industry led to falling profit rates and predicted that it would lead to the collapse of capitalism.⁵ In pace with stock market crashes and deep depressions in the 1920s and 1930s, confidence in free market forces waned.

The British economist John Maynard Keynes’ theories of economic management set a new standard for post-war economic thinking. Keynes argued that a decentralised market economy alone would not be stable. He advocated in particular that government should stimulate the economy in adverse periods by increasing government spending. Such a countercyclical policy was necessary in order to ensure that the market economy could again function effectively.

Keynes’ theories gave support to an era of more state planning and control. Some countries went farther than others. In Norway, the first Nobel laureate in economics Ragnar Frisch was an important agenda-setter. Frisch, who worked here in this department, wanted to make the subject more scientific by using mathematics and statistics. According to Frisch, economic theory should be expressed by mathematical models and supported by quantified relationships. He made a substantial contribution to the development of accounts for the nation as a whole – national accounts. When economists worldwide discuss concepts such as gross domestic product, private consumption and investment, this can to a large extent be attributed to Frisch. Together with Trygve Haavelmo, also a Nobel laureate in economics, Frisch contributed to giving the Department of Economics at the University of Oslo a proud past. Frisch was sceptical as to whether market forces alone would ensure an efficient distribution of resources. Equipped with new tools, he saw the economist as a sort of social engineer who, with the help of mathematical models, detailed accounts and proposals for regulation, management and control, could assist government and parliament in improving living standards and welfare.

Confidence in government planning and management marked Norwegian economic policy in the 1950s, 60s and 70s. Self-confidence among economists was considerable, as was their influence on economic policy. The work was led by former students of Frisch, such as Erik Brofoss who became finance minister and later also central bank governor. The following quote from his presentation of the central government budget in 1946 reflects his ambitions:

“People have gradually managed to free themselves from the oppression of the forces of nature through scientific and technical progress. They have succeeded in breaking the chains of nature that have restrained humanity. It would be a step towards greater freedom if we could liberate ourselves from the blind submission to the randomness in economic life, which seems to the individual to be a force of nature. We must seek to master economic forces rather than being mastered by them. To this end, a deliberate, planned and coordinated economy is necessary.”⁶

⁴ In Tore Jørgen Hanisch, Espen Søylen and Gunhild Ecklund (1999): “Norsk økonomisk politikk i det 20. århundre. Verdivalg i en åpen økonomi (Economic policy in Norway in the 20th century)”, Høyskoleforlaget, p. 38.

⁵ In Agnar Sandmo (2006): “Samfunnsøkonomi – En idéhistorie (Economics – a history of ideas)”, Universitetsforlaget, p. 117.

⁶ Espen Søylen (2002): “Mot et samfunnsøkonomisk Optimum (Towards an economic optimum)”, in a series of reports by the Committee on Power and Democracy.

Norway was among the countries that went particularly far in developing an economy with a high degree of centralised coordination and control. It may perhaps be said that this work culminated in the 1973 proposal to establish an incomes policy council. The social partners were to undertake a commitment to keep negotiated wage increases within specific limits. The proposal to establish an incomes policy council was logical. It was the last wall in the structure erected after the war. Other elements were:

- fiscal policy – the management of public spending and revenues – was oriented towards full employment
- credit regulation within limits specified in a separate credit budget
- channelling of loans through state banks
- regulation of cross-border capital movements
- low nominal interest rates stipulated by the government authorities
- a fixed, though adjustable, krone exchange rate
- use of price regulation
- an active business policy through state ownership and state grants and subsidies.

The proposal to establish an incomes policy council did not receive support. There was just too much state control and coordination. Today, 40 years later, little remains of the management system that was built after the war. The structure was not sufficiently robust.

Detailed management and regulation of the economy was not able to deliver sustainable growth and welfare. On the contrary, the result was poor efficiency and wide fluctuations in the Norwegian economy in the 1970s and 1980s. The wide fluctuations culminated in a credit boom in the mid-1980s, which was followed by a banking crisis and a deep recession with high unemployment at the end of 1980s and the beginning of the 1990s.

The way the economy is organised has changed considerably over the past 20–25 years. It would therefore be incorrect to say that one economic model has applied to Norway through the postwar period. Experience has shown that fiscal policy alone cannot ensure a high level of employment. The structure of the labour market and of wage formation is probably of greater importance. The direct regulation of credit, interest rates and capital movements broke down and was phased out in the 1980s. The krone no longer has a fixed value relative to other currencies. Its value is determined from one minute to the next based on supply and demand. We say that the krone is floating. Price regulation no longer plays a role as a macroeconomic instrument. The scope of business policy has become more general. At the same time, the tax system has become more efficient. Tax rates are lower and the tax base broader. State ownership in the Norwegian business sector remains extensive, but the management of ownership has been completely changed. A number of markets in which the state used to be the sole owner have been opened up to the private sector. The competition in the power and telecom markets and in aviation and broadcasting that you would regard as a matter of course today did not emerge until the 1980s. State-owned companies were listed on the stock exchange and unprofitable enterprises are no longer kept artificially afloat. Norwegian businesses also face increasing global competition. International agreements, through our close collaboration with the EU and through the World Trade Organisation, have provided for freer flows of labour, goods, services and capital in and out of the country.

Last but not least, rules and principles for economic policy were introduced in Norway, as in other countries, to prevent policy decisions based on shorter-term considerations and shifting preferences. The Norwegian economist Finn Kydland, who is from my home district of Rogaland, received the Nobel Prize in economics for his study showing that economic

performance can be improved if policymakers can commit to a pre-established set of credible policy rules.⁷

Four pillars were established in the 1990s and in 2001 to stabilise economic developments:

- the petroleum fund mechanism
- the fiscal rule
- a floating exchange rate
- inflation targeting

This system was introduced in response to the sharp upturns and downturns in the economy over the first twenty years of the Norwegian oil age.

As a result of the petroleum fund mechanism, a greater share of government petroleum revenues is invested abroad. This curbs the impact of oil price fluctuations on demand and output – as well as on inflation and the exchange rate. The rules for the investment of these oil revenues prevent individuals or groups from gaining strong control over Norway's oil wealth.

The fiscal rule for the central government budget states that petroleum revenue spending shall be limited to the return on the funds invested abroad. This provides for a gradual phasing-in of oil revenues and a rate of spending that can be sustained for several generations. The fiscal rule is a binding commitment policymakers have imposed on themselves and is intended to foster long-termism and predictability in fiscal policy.

Norway's floating currency, which normally appreciates in good times and depreciates in bad times, also has a stabilising effect. The advantage of this effect is most evident when economic developments are weak. For example, many southern European countries that have adopted the euro are currently facing considerable challenges. To improve competitiveness, wages in these countries must fall or at least rise much more slowly than in other European countries. This only occurs when unemployment is high. With a flexible exchange rate, competitiveness can also improve when the domestic currency falls in value. A flexible exchange rate can thereby reduce fluctuations in employment and output. On the other hand, the foreign exchange market can be mistaken, driving the exchange rate away from the path indicated by fundamental conditions. Herd behaviour and market psychology can contribute to fluctuations and instability.

In spring 2001, the Norwegian government and parliament defined a formal inflation target for monetary policy. The task of achieving the target was delegated to Norges Bank. Norges Bank sets the interest rate on banks' deposits and loans from the central bank. This interest rate determines banks' lending and deposit rates and the level of interest rates in general, as well as the price of the loans you take out as students.

The interest rate is set with the objective of ensuring low and stable inflation. The operational target of monetary policy shall be annual consumer price inflation of close to 2.5 per cent over time. Low and stable inflation is now the guiding principle behind interest rate setting in most western countries. New Zealand was the first country to introduce an inflation target at the end of the 1980s. Many other countries have since followed suit. But even though inflation targeting is a relatively new phenomenon, the idea is not new. As early as the beginning of the 1900s, the Swedish economist Knut Wicksell proposed that the interest rate should be used to keep the value of money – the price level – stable.⁸

⁷ Finn E. Kydland and Edward C. Prescott (1977): "Rules Rather than Discretion: The Inconsistency of Optimal Plans", *Journal of Political Economy*, 85, nr. 3, pp. 473–491.

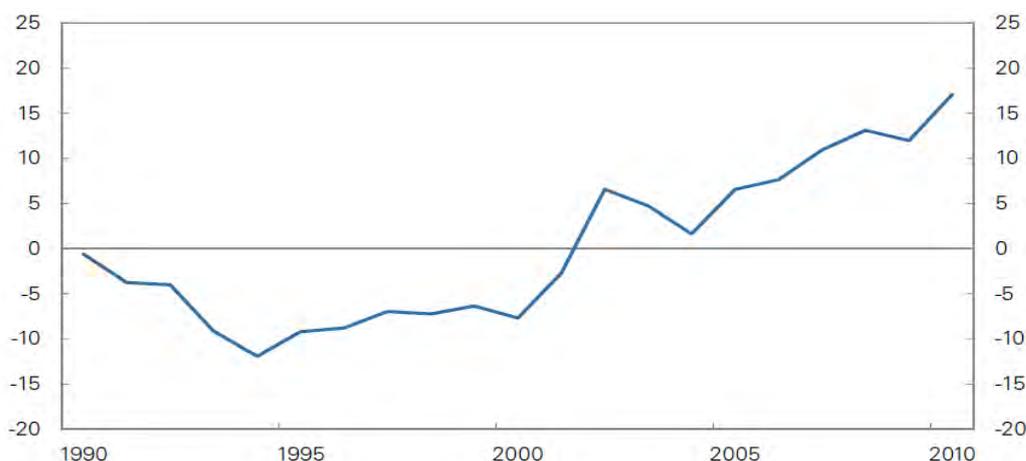
⁸ Knut Wicksell (1907): "The Influence of the Rate of Interest on Prices", *Economic Journal*, XVII, pp. 213–220.

The shift in the Norwegian economy, combined with a generous dose of good luck, has resulted in two “golden decades”. The major structural reforms have led to more efficient use of labour and other resources. Developments in the Norwegian economy have been fairly stable. Unemployment has been low. We have also had luck on our side over the past decade. Prices for Norwegian export goods, such as oil and gas, metals, minerals, fish and freight, rose sharply. At the same time, there has been a considerable decrease in prices for our imports, such as clothing, footwear and electronic equipment. From 2003 to 2008, this improvement in Norway’s terms of trade alone boosted national income by more than 20 per cent, or a good 4 per cent per year. The picture of Norway’s favourable situation has been reinforced by the very severe impact of the financial crisis on other western economies, while Norway seems to have emerged with nothing more than a mild downturn.

Nevertheless, there are many challenges ahead.

Chart 1
Relative labour costs

Deviation from the average for the period 1970–2009
 Per cent, 1990–2010¹



¹ Figures for 2010 are an average for the period 1 January–19 August 2010. A rising curve indicates weaker competitiveness.

Sources: Statistics Norway, Technical Reporting Committee on Income Settlements (TBU), OECD, Ministry of Finance and Norges Bank.

Norwegian labour has never been as costly as it is now. Norwegian businesses may lose out in the competition for contracts given the current high level of spare capacity in other countries. There are frequent reports of businesses relocating activities to neighbouring countries, such as Sweden. Labour in Sweden is perhaps as much as 30 per cent cheaper than in Norway and the two countries are closely connected in terms of language and culture.

The management of Norway’s oil wealth poses another challenge. History has shown that countries that suddenly gain access to an abundance of resources have a tendency to deplete the values rapidly and then fall into decline.⁹ Since the introduction of the fiscal rule in 2001, oil revenue spending in Norway has been increased by close to NOK 110 billion. Oil revenues now fund about 1/6 of government expenditure. Without a fiscal rule, spending

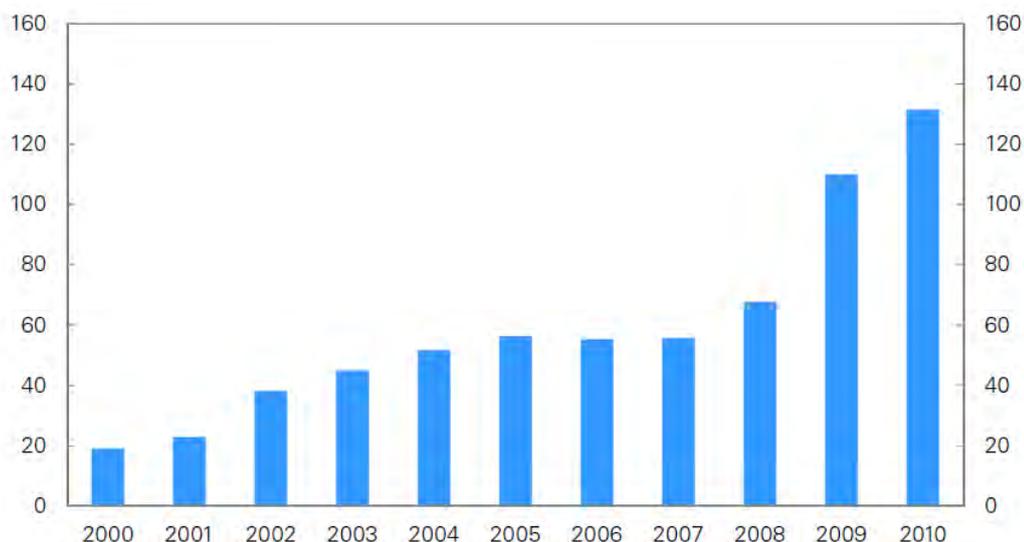
⁹ *The Paradox of Plenty. Oil Booms and Petro-States* by Terry Lynn Karl (1997) provides a good description of the problems facing oil-exporting countries.

would probably have been higher. In the 1950s, 60s and 70s, the tax burden was steadily increased to finance higher government expenditure. The return on our oil wealth has now taken over as the source of funding for increased public consumption.

Chart 2

Oil revenue spending¹

In billions of NOK, 2002–2010



¹ Structural non-oil deficit.

Source: Ministry of Finance.

But looking ahead, funding Norway's welfare system will be demanding. Increases in oil revenue spending cannot be sustained for much longer. Oil production will decline. At the same time, we have been through a period in which the need for welfare services has been fairly stable. The age-dependency ratio has shown little change. The demographic landscape will not be as auspicious in the decades to come. Even though sound institutions have been built for the management of Norway's oil wealth, it is too early to assess the effectiveness of our management. And even though the pressure to spend even more oil revenues has been considerable, it is likely that future generations will hold the view that we could have saved even more.

Another important issue is what should be done to prevent further crises in financial markets. The global financial crisis has revealed weaknesses in the financial system. It has become clear that supervision must encompass the financial system as a whole, and not be limited to the individual financial institution or financial market. The term used to refer to this supervision of the financial sector is macroprudential policy. The financial crisis is a topic that will probably hold the attention of economists for several decades to come.

In my introduction, I commented briefly on the subject economics. Economics is a wide-ranging field and is clearly related to sciences such as mathematics and statistics, but also to other social sciences such as political science, sociology, philosophy, psychology and law. As economists, we often operate in the borderland between economics and politics. In a speech to his students introducing a series of lectures on economic theory about 60 years ago, Ragnar Frisch describes the economist as a servant, albeit an important servant. He says the following about the challenges we have to face:

"In this confusion of fundamental social welfare concerns, conflicting economic interests and complex causalities – big and small – the economist is supposed to

try and find a kind of path. He is supposed to explain both what is happening and what would happen if such and such an action were taken."¹⁰

However, as he also points out:

*"The purpose is not that he should reach a conclusion of the type: this is how you should act now! ... Any economically important decision must also be based on a number of human, ultimately political, assessments that the expert, the economic scientist, is by no means more qualified to decide on than other good citizens."*¹⁰

It can often be difficult to distinguish the object, ie exercise objectivity, from the perception of that object, ie subjectivity. Ragnar Frisch discusses this too. In an article written in 1936, he draws a line from the natural sciences through to the social sciences, where

*"... the difficulties of arriving at such unconditionally valid results become greater and greater. The reason for this is first and foremost that the whole system of ideas on which the natural sciences are based becomes increasingly more diffuse as one approaches the social sciences."*¹⁰

When I was a student here at the University of Oslo at the beginning of the 1970s, there was a fairly broad consensus that the problem of unemployment had been solved once and for all. The belief was that the economy could be fine-tuned through government management, control and regulation.

A similar optimism prevailed with respect to economics in the years prior to the financial crisis. In the preceding 15–20 years, the global economy was characterised by solid growth, greater economic stability than earlier and by low and stable inflation. The period is often referred to as "the great moderation". A consensus was forming that wide fluctuations in the economy, as had been the norm, were a thing of the past. The US economist and Nobel Prize winner in economics Robert E. Lucas expressed a commonly held view in a speech he gave in 2003:

*"[...] macroeconomics in this original sense has succeeded: Its central problem of depression prevention has been solved, for all practical purposes, and has in fact been solved for many decades."*¹¹

Autumn 2008 was to become a reminder that we should be on our guard against established truths and consensus. If history has taught us anything, it is how little we actually know. So, if I were to offer some advice to those of you about to embark on your economics studies, I would first and foremost say this: be inquisitive and ask questions. Learn enough to be able to doubt.

And since I have the chance for a word with you "in private" I would like to seize the opportunity to put in a good word for mathematics. A wealth of information and complex problems often make it difficult to see the essence of an issue and to distinguish what is important from what is not. And this is where mathematics can be helpful. Mathematical models and formulas simplify complex relationships into manageable quantities. A conversation between Odd Aukrust and Trygve Haavelmo, two giants in Norwegian economics research, shows that there is more than one way to use mathematics. They sat talking and began to discuss the subject of formulas and formulations. Aukrust said *"my brain is so oriented towards the concrete that every time I see a formula, I turn it into a numerical example"* Haavelmo answered: *"that's odd. Every time I see a numerical example, I have to turn it into a formula to be able to understand it."*¹²

I wish you good luck with your studies. You have made a good choice. Thank you for your attention.

¹⁰ Ragnar Frisch (1995): "Troen på nøkken (A collection of essays, lectures and articles)", Universitetsforlaget.

¹¹ Robert E. Lucas, Jr. (2003): "Macroeconomic Priorities", The American Economic Review, Vol. 93, No. 1, p. 1.

¹² Dagens Næringsliv (1989): "Sky Nobelpris-vinner (Shy Nobel Prize laureate)", 12 October 1989.