Nordic Journal of Political Economy

Volume 36 2010 Article 3

Keynesian economics and the Oslo School

Ib E. Eriksen* and Arild Sæther**

^{*} Faculty of Economics and Social Sciences, University of Agder, Kristiansand, Norway. E-mail adress: Ib.E.Eriksen@uia.no

^{**} Faculty of Economics and Social Sciences, University of Agder, Kristiansand, Norway. E-mail adress: Arild.Sather@uia.no

Ib E. Eriksen and Arild Sæther

Keynesian economics and the Oslo School¹

Abstract

The economic crisis of the 1930's hit Norway when Ragnar Frisch returned from the US to accept a professorship at University of Oslo. On his return he wrote newspaper articles proposing tax relief and monetary policies to fight the economic crisis. Frisch abandoned his monetary policies and developed his Oslo School emphasising mathematical models, econometrics, national accounts, and detailed state governance. For the next four decades this School dominated economic policy in Norway where market forces had been substituted with administrative decision making. Keynes, with his General Theory, pointed out that a market economy with an active government can secure full employment. When the ideas of the Oslo School were challenged at the end of the 1970's, by academics and through the poor performance of the economy, it collapsed. A decentralised market economy was reintroduced and The Keynesian paradigm emerged as the preferred theory compared to the approach of the Oslo School.

JEL classification: B22

Keywords: History of Thought, Macroeconomics

_

¹ Unfortunately our colleague and good friend Tore Jørgen Hanisch passed away on January 15th, 2007. Without his books, articles, working papers, notes and our close collaboration for many years this article could not have been written.

1. Objectives

The purpose of this paper is first, to investigate how Keynes' economic theories and policy recommendations were introduced into Norway. Second, to describe the different roads selected by the Keynesians and by the members of the Oslo School. Third to discuss the Oslo School's attitudes to Keynes and finally to outline their differences related to the market economy.

2. Background

The world economic crisis at the end of the 1920's and beginning of the 1930's hit Norway more severely than most other European countries. Production decreased and unemployment reached levels that had not been seen before. As an example GDP per capita fell by more than 8 % in 1931, unemployment among members of the Federation of Trade Unions was almost 19% and during the winter of 1931-32 unemployment among union members rose sharply. In the winter of 1932-33 unemployment among union members rose to more than 40% and across the entire labour force it was more than 15 %. Although people at that time had more respect for the authorities than today this situation caused serious social unrest. There were strikes, shops were plundered and managers of poor relief offices were beaten up. A long succession of "crisis entrepreneurs" came up with all kinds of proposals to solve the crisis. Devaluation, increased public employment, works service for young men and marketing campaign to create optimism only to mention a few.

This was the situation when the two professors of economics, Ingar Wedervang (1891-1961) and Oskar Jæger (1863-1933) managed in 1931, by extensive lobbing both inside the University of Oslo and vis-à-vis the politicians, to convince the Parliament to create a professorship in economics and statistics for Ragnar Frisch (1895-1973). Frisch then made the decision to decline an attractive offer of a tenured professorship from Yale University and returned to Oslo.

The outcome of these events had, according to Bjerkholt (2000) a major influence on the career of Ragnar Frisch as well as on the development of empirical social science in Norway.² He could have added that it also has had a major influence on state economic planning and the economic development of post war Norway.

Ragnar Frisch had, as the only child, been appointed to take over his family's goldsmith business. However he chose to study Political Economy at the University of Oslo and he graduated with distinction in 1919. The year after he also took the examination to became a certified goldsmith. But his study of economics had caught his interest. He received a scholarship, and in the next three years he studied economics, mathematics and statistics in France, Great Britain, Germany, Italy and the United States. In 1925 he became a research assistant on a research programme in production theory. In 1926 Frisch defended his doctoral thesis 'Sur un problème d'économie pure' at the Faculty of Mathematical and Natural Sciences. The year after he received a three year Rockefeller Scholarship and went again to the US. In 1929 he became associate professor at the University of Oslo.

3. Frisch and the Economic Crisis

Frisch had in his early career not been concerned with the present economic problems. However, when he returned from his second visit to the US he began to show a strong and growing interest

² Bjerkholt (2000) p.6.

in economic policy. The background for this change was the world depression and its effect in Norway as described above.

Frisch was in 1930-31 again in the US. He stayed at Yale University as an invited guest of Irvin Fisher (1867-1947), who was a well known economist who both politicians and academics listened to.³ Fischer favoured the tools of the Federal Reserve over public works or other financial instruments that the government could use to fight unemployment. The reason was that he believed that the key to stabilisation was to influence the value of money. Increasing prices would lead to increase in production and lower unemployment and falling prices would lead to a decrease in the activity level and an increase in unemployment. The Federal Reserve could change interest rates, it could change the banks liquidity reserve rates and it could use market operations. Fisher was in 1946 created honorary doctor at the University of Oslo.

Frisch had a very productive period during his stay at Yale University.⁴ Munthe (1999) claims that Frisch was strongly influenced by his host Fisher and other American economists.⁵ When he returned from Yale in 1931 he advocated tax relief and monetary policies as the economic instruments to move the Norwegian economy out of the crisis.

In the spring of 1932 Frisch gave three radio lectures on *The Business Cycles*. These lectures were printed in the series *The University's Radio Lectures*. Here he strongly attacked what he called the saving mania in both the private and public sector of the economy.⁶

Since it was the Parliament that in 1931 came up with the money for his professorship Frisch felt he had an obligation to give something back. In the autumn of 1932 he therefore took the initiative and managed to arrange some private meetings; with the prime minister and his staff, with prominent parliamentarians of the non socialist parties and with the leaders of trade and industry. In these meetings he presented his views on the crisis and his remedies to cure it. But, he did not succeed in convincing these people that his ideas could solve the economic problems. Frisch has later said that "it was like hitting his head against a wall" and that "their dilutions were many". However, this opposition inspired him to put his ideas into writings.

In January 1933 Frisch therefore wrote three articles in the daily newspaper *Dagbladet*. These articles where published in a little brochure *Sparing og circulasjons-regulering* (Savings and circulation regulation). Here he presented his thoughts about the causes of the present economic crisis and his ideas of how it would be possible to get out of it. His basic point was, at this time, that the crisis was not a production or poverty crisis, but a turnover and organisation crisis. It was therefore his opinion that it was not necessary with fundamental changes in the economic system. His arrangement built on the present system of private ownership. What was needed was a public system, which did not directly involve itself in production life but, influenced it indirectly by removing the special turnover and organisational bottlenecks.

It was in the monetary system that Frisch saw the reason for the artificial economic downturn or crisis and as a consequence it was here that the planned corrections should be targeted. The monetary policies had in his opinion been governed by certain "monetary fictions" which in three different ways had caused the depression; 1) a skewed distribution of purchasing power between branches and sectors, 2) a skewed distribution of purchasing power between

³ Schumpeter (1954) considers: "Fisher as the greatest of America's scientific economists up to our own day". Pp.871-872.

⁴ According to Olav Bjerkholt, *Sosialokonomen* no. 8, 1999 pp. 34-36, Frisch produced three important articles; *Pitfalls - Confluence Analysis, New Methods* (Measurement of marginal utility) and *Propagation*.

⁵ Munthe (1999), s. 145. However it should mentioned that Bjerkholt (1999) argues against this proposition and thinks it has been 'taken out of the air'.

⁶ These lectures were reprinted in 1947 as "Noen trekk av konjunkturlæren" (Some features of business cycle theory), pp.41-46.

⁷ Petter Jakob Bjerve and Ragnar Frisch: *Økonomisk teori og økonomisk politikk* (Economic theory and economic policy), p. 5. University of Oslo, Institute of Economics 1971.

⁸ It was later published as a memorandum entitled *Statens plikt til cirkulasjonsregulering* (The governments's obligation to circulation regulation), Institute of Economics January 11th 1951.

economic classes and 3) the so called "encapsulating phenomena". Frisch put greatest emphasize on the last phenomena. By this he meant the fear mentality that developed during a depression. This fear had as an effect that businesses, branches and even nations started to behave like the trolls in Ibsen's Peer Gynt – 'be thyself enough'. All economic actors reduced their use of other commodities and services and did not dare to place new orders before they realised that their own sales had increased.

The objective of the government, according to Frisch, should be to utilize all available resources, both labour and capital. The state should not only redistribute purchasing power. It should also increase the supply through tax relief. Here it was essential that the deficit was not financed with loans in the market, which were in competition with private loans, but with an increase in credit. Public works were not a part of his plan. He wanted to increase the activity in society by stimulating consumption. When the economy had reached its equilibrium with full employment, the government should "withdraw from the play".

The analysis and recommendations in these articles were harshly reviewed by Ole Colbjørnsen (1897-1973), financial expert in the daily newspaper Arbeiderbladet. This newspaper was at the time the main media outlet for the socialist Labour Party. Colbiørnsen attacked the professor for giving benefits to people that already earned so much that they had no problems in paying tax. Why not give the support to the unemployed? Or even better: Why not use the money to put people to work? He claimed that Frisch was just scratching the surface of the crisis and that he should have been discussing the problems of private capitalism and its basic weaknesses. Furthermore he asserted that Frisch was far behind his more progressive Nordic colleagues and mentioned Bertil Ohlin. Frisch' proposals were just another example of a reflation initiated by the government. He was surprised that Frisch did not embrace the programme of the Labour party and that he did not see that private capitalism had failed and that the road forward was a socialist planned economy. Frisch counterattacked and claimed that the main weakness with Colbjørnsens planned economy was that he did not put enough emphasize on private initiative. According to Frisch a planned economy had to be organised in such a rational way "that one can utilize the tremendous energy source which is implied in the will and initiative of each individual".9

Surprisingly the discussion between the two had in a short time the consequence that they started to cooperate. How this came about is, according to Munthe (1995), not clarified but it is known that Frisch in the autumn of 1933 had a private meeting with the top parliamentarians of the Labour party and that this meeting changed his opinion.¹⁰

The fact is that Frisch and Colbjørnsen started a fruitful collaboration and that they together took part in the development and making of the Labour party's crisis plan of 1934. Here Frisch gave up his proposal about tax relief and accepted the proposal for a strong increase in public spending and that it should be partly financed by an increase in taxes. He was however, at this time, more occupied with the monetary aspects of the crisis plan. Colbjørnsen on the other hand accepted that increased public spending should be partly financed by loans. His major concern was the effect on the real economy. He had also in 1933, together with Axel Sømme (1899-1991), written *En norsk 3-års plan*" (A Norwegian 3-year plan) where the state should heavily invest in the economy as a first step to a fully socialist economy. He state could do it and the state would be more rational than private businesses.

⁹Arbeiderbladet 15.05.33.

¹⁰ Munthe (1995), p. 281.

¹¹ Axel Christian Zetlitz Sømme, Dr. philos. 1931, professor in economic geography at the Norwegian School of Economics and Business Administration 1948-69.

4. How Did Keynes' Ideas Come to Norway?

The economic crises at the end of the 1920's and the beginning of the 1930' caused, as already mentioned, a sharp rise in unemployment. The Norwegian government appointed in 1930 an *Unemployment Committee*. This committee ended its work two years later with a White Paper. It discussed thoroughly the problems that the Norwegian economy was faced with. The committee did not come up with many new solutions. However, it had a minority view pointing to the weakness of a capitalist society. The *Committee* also had a section in which it analyzed and pointed to specific problems in each industry. This discussion was taken up and further discussed in a radical manner in the above mentioned 3 year plan. This publication created quite a disturbance and debate. According to Munthe (1999), this was partly, due to the fact that one of the authors, Colbjørnsen, had been in the service of the general staff of the Soviet planning directorate.¹²

Ole Colbjørnsen had been a brilliant student in mathematics and physics at the University of Oslo during World War I. The university's most prominent researchers, the professors Lars Vegard and Carl Størmer hired him as their research and teaching assistant. He also belonged to a small group of scholars and students who managed to invite Albert Einstein for a visit to the university.

Colbjørnsen' superiors predicted that he could have had a bright career in the world of physics. However, he experienced a political awakening and became engulfed in politics on the left side of the political spectrum. He became a glowing Marxist and joined the Norwegian Communist Party. He saw the Soviet state as the proper "land of dawn" and wanted to take active part in this historical project. He learned the Russian language, contacted the Soviet ambassador and went into Soviet service. First, in 1921, he became director of the Soviet telegraph bureau Rosta. In the years 1922-28 he worked for the Soviet Foreign Trade Service in Oslo. Here he worked mostly as director of the finance division and as a trade director, but he also worked in Moscow, Arkhangelsk and Leningrad. The business of the trade service was mainly to organize the export of Soviet wood products. During these years he also worked as a consultant in connection with the organization and development of the Soviet foreign trade monopoly and the preparation of the first Soviet 5 year plan. In his work he made visits to the trade services London office. This lead him to his new position, and from1929 to 1931 he worked as director of a Soviet shipping company in London, which took care of the Soviet timber export.

However, he became increasingly skeptical to Stalin's dictatorship, and at the end of 1931 he defected from Soviet service, and moved back to Norway.¹³ In 1932 he became, as mentioned above, a financial journalist in the daily newspaper *Arbeiderbladet*, a post he held until the Nazi-German attack on Norway in 1940.¹⁴

During his years in London, Colbjørnsen followed very closely the new developments in British economic policy. He was also impressed by the change that took place in the attitudes of economists like William Beveridge and John Maynard Keynes. ¹⁵ Both Beveridge and Keynes were very much concerned with the practical consequences of the economic crisis in general and the

_

¹² Munthe (1999) p.142.

¹³ Colbjørnsen did not in public talk much about his years in Soviet service. Probably he was well aware of how Stalin's KGB treated defectors. Many have criticised him for not talking openly about his experiences in the Soviet Union, and his defection in 1931. However, indirectly he told it all by being a dedicated supporter of NATO until his death in 1973.

¹⁴ On April 9th 1940, the day German troops invaded Norway, Colbjørnsen took part in the transportation of the Norwegian gold reserve from the Bank of Norway and out of Oslo, to Molde, Northern Norway and to safety in England. In the years 1940-48 he was financial attaché at the Norwegian Embassy in Washington. From 1949 he was director of the Division for Economic Readiness in the Ministry of Trade. Later he became head of the board of the Norwegian Bank of Manufacturing.

¹⁵ Beveridge, William Henry (Lord Beveridge) (1879) was the director of London School of Economics from 1919 to 1937.

unemployment problem in particular. Both took active part in the political debate. Although Colbjørnsen still believed that a democratic socialist planned economy was the best he was impressed by Keynes views that it was possible with an active state to secure full employment in a society based on a market economy.

At the end of the 1920's and first half of the 1930's Keynes, in newspaper articles and, pamphlets, actively proposed his ideas, in a language that politician and lay people could understand, about what should be done to cure the crisis, The theoretical basis for these ideas he later expressed in his book *The General Theory of Employment, Interest and Money*, which was published 1936.

According to Munthe (1999), in a section called Keynes before Keynes, his views are most pronounced in a pamphlet written for the English Liberal Party in May 1928 entitled: Can Lloyd George do it? That is, can the leader of the party and the candidate to be the next prime minister keep his promise to reduce unemployment? Keynes, who was a strong supporter of Lloyd George, answered with a booming yes: By using 100 hundred million pounds a year could half a million unemployed be given work. They could build houses, roads, railways, telephone and telegraph lines, and they could drain marshland so the agricultural area could be extended. Keynes claimed that the increased incomes would give the government higher taxes and that these together with a reduction in the defense budget would be sufficient to make the works self financed. The Government debt would therefore not increase. In the back of these computations 'the multiplier' can of course be seen.

The Liberal Party before the election in 1929 came up with the slogans; We can conquer unemployment and Let us mobilize for prosperity. Keynes supported its proposals against the bureaucrats in the Ministry of Finance, who thought these proposals were extravagance and would cause inflation and bankruptcy. They also claimed that public investments would not reduce unemployment because it would oust private investments. Increased public investments would increase the demand for savings and since savings were limited this would increase the interest rate, which in turn would make private investments unprofitable. The basic view of the ministry was that savings was scare and Keynes had to go into extensive discussion to show that this was not the case.

Colbjørnsen followed this debate, accepted Keynes' views and brought Keynes proposals with him when he returned to Norway. As a financial journalist he wrote numerous articles advocating these proposals and solutions to the economic problems Norway was faced with. These articles were again, according to Munthe, "more influenced by the liberal English economists than by Lenin and his disciples". ¹⁶

At this time the economic policy in Norway was not so different from what was the case in United Kingdom. The non socialist parties had a clear majority in the parliament, Stortinget, but could not agree to form a strong government. The socialist Labour Party had not yet recovered from the internal feud between the socialists in the 1920's. Until 1932 the political slogan was "Vente på bedre bør" (Let us wait for fair wind), and the economic policy built on the principle that the government and local municipalities should save. As a consequence they claimed that the burdens on the private business life would be less and the activity would be increased.

The Labour Party had until 1932 not an alternative to this short term policy. However this changed when Colbjørnsen arrived on the scene. Inspired by Keynes but also building on his experience working with the Soviet 5 year plan, he started a series of articles in *Arbeiderbladet*. His main points were that the crisis with its massive unemployment was unnecessary and could, even in a non socialist society, be avoided with efficient intervention by the state. In the already mentioned *Norwegian 3-year plan* a cohesive expansive anti crisis policy was presented. At the same time he took active part in the creation of the Labour party programme before the 1933 election. Before this election the Labour Party had advocated revolution, Colbjørnsen showed another

¹⁶ Munthe (1999), pp. 143-144.

way. He stated that it was ridiculous in a relative poor country to have hundred of thousands unemployed. "We can not be poorer by working" was his central message. With Colbjørnsen's slogan "The whole people at work" and a reasonable cohesive economic program to bring the country out of the crisis the Labour Party got more than 40 % of the vote.

In 1934 Colbjørnsen and Frisch started to collaborate. In the Labour Party's 1934 crisis plan they wrote important sections together. Frisch did not any longer praise private initiative and tax relief and Colbjørnsen on the other hand toned down his Soviet type production steering. Together they, without saying it, advocated policies that Keynes had proposed 5 years earlier. Proposals for extraordinary grants to roads, railroads, telegraph and emergency works were forwarded. Emergency works could be financed by loans.

When the Labour Party formed the government after the 1935 Parliament election they could have put their crisis plan into effect. However, this did not happen. Colbjørnsen was seen as a theorist, and maybe some even questioned his loyalty because of his years in Soviet service, he therefore did not get an appointment in the government. Frisch was also seen as theorist and an unpractical politician. His proposals were unrealistic and he had a tendency to "shoot pigeons with cannons" it was said.

The new government, with Johan Nygaardsvold as prime minister, did not follow the crisis plan and neither did they carry out policies recommended by Keynes and his followers. The budget was kept in balance and the grants for public works were rather small. The government carried, according to Vogt (1961), out a direct contractive fiscal policy. In his opinion could these years be seen as the years of neglected possibilities.¹⁷ However, the business cycle turned in 1935, partly because of the rearmament in Germany, and the economic situation gradually improved.

Both Colbjørnsen and Frisch were disappointed. Colbjørnsen, as a Member of Parliament and an economic journalist, moved away from Keynesian policies and advocated "industrial socialism". The state should through an active industrial policy invest in manufacturing industries that should compete with and squeeze out private capital. Frisch with his research and the new study program at the University of Oslo, whose first graduates completed their studies in 1939, concentrated on building up what later was called the Oslo School. He became increasingly skeptical to a market economy and advocated more and more a centrally planned economy. World War II, with the Norwegian government in exile in London, gave the proponents of "industrial socialism" breathing space to develop the institutional and judicial system that was necessary for a centrally planned economy in Norway after the war.

5. The Rise and Fall of the Oslo School¹⁸

The year after he had been appointed professor he also became one of the directors of the Institute of Economics. The other director was Ingar Wedervang. He and Frisch had in 1930 written an application to the Rockefeller Foundation for financial support for the establishment of an Institute of Economic Research. This application was granted, on the condition that Frisch would be one of the directors. When Wedervang left to be the rector of the newly founded Norwegian School of Economics and Business Administration in 1937, Frisch became its sole director, a position he held until 1960.

As professor of economics and statistics, and as one of the directors of the Institute of Economics, Frisch started his grand project of bringing economics as a science out of 'the fog'. He fought against what he called 'fictional economics' and his enemies, and they were at the time many, belonged to what he called 'the unenlightened plutocracy (pengeveldet)'. He believed that economic theory had to be based on mathematical models and quantitative analysis. The new economics

_

¹⁷ Vogt (1961) p. 29.

¹⁸ This section builds on Eriksen, Hanisch and Sæther (2008): *The Rise and Fall of the Oslo School,* The Nordic Journal of Political Economy 2008.

should be shaped in a precise mathematical language. Mathematics gave a greater precision to study the consequences of given assumptions. It was only with mathematical models that it would be possible to carry out complicated analysis and reasoning. He promoted these ideas with enthusiasm, genius and force.

On the strength of his research, a new study programme, the new staff he recruited and his ability to brush all resistance aside, he succeeded, in a few years, to create his own school within economics. This Oslo School could be characterised by; the use of mathematical models, the development of econometrics, development of national accounts and macroeconomic planning models. In addition it could be described by an increasingly strong scepticism to the use of market forces and a strong belief in a centrally planned economy with detailed state governance. Finally, in spite of Frisch's international experience, it had little interest in the international debate about the feasibility and efficiency of planned economies.

The first students from the new study programme graduated in 1939. When the government 1940 had to go into exile in London after the German occupation of Norway, some of these graduates joined it. Here they immediately started to make plans for the Norwegian economy after the war. When the war ended in 1945 these 'old' graduates together with the 'new' graduates took over important positions in the ministries. The Institute of Economics, the research department in the Bureau of Statistics and the planning department in the Ministry of Finance were called the 'Iron Triangle'. Focus was on macroeconomic planning and politics in a detailed regulated economy, where free market forces to a large extent had been eliminated. The Norwegian planned economy developed features in these post war years that were very close to the planned economies of Eastern Europe.

Two professors, in addition to Ragnar Frisch, played an important role in the development of the Oslo School. Trygve Haavelmo (1911-1999) had joined Frisch as a research assistant already in 1933. Since this time he and Frisch worked closely together only interrupted by the war. In 1938 Haavelmo was visiting professor at University of Aarhus and in 1939 research fellow at Harvard University. Caught in the US by the war he worked for Nortraship, an organisation set up by the Norwegian government in exile and Norwegian ship owners, to administer the war effort of the Norwegian merchant marine. After the war he stayed a year with Cowles Commission in Chicago, where he, according to Schumpeter (1954), 'exerted an influence that would credit to the lifetime work of a professor'. His doctoral thesis entitled *The Probability Approach in Econometrics* from 1944 should be mentioned since he showed that the results of many of the methods used thus far had been misleading. Returning to Norway he was appointed professor of economics in 1948, a position he held until his retirement in 1979. With his many important research contributions, his teaching, and his generosity and gentle personality, he had a decisive influence on the development of economics. He won the Nobel Memorial Prize in 1989 for his fundamental contribution to econometrics.

Leif Johansen (1930-82) entered the University of Oslo in 1948 and became the assistant of Frisch in 1951. Since that year they worked closely together. When Frisch retired in 1965 Johansen took over his chair. Among Johansen's most important contribution was his doctoral dissertation, A Multi-Sectoral Study of Economic Growth from 1961, which became the basis for the long-term economic planning by the Ministry of Finance. Macroeconomic planning, research and policy, became the alpha and omega in the Norwegian post war economy. With Johansen, economic planning became a very strong discipline in the study programme in economics at the University of Oslo. His Lectures on economic planning became a standard work to be used for students as well as economic planners.

As a consequence of his involvement with the Labour Party and his close collaboration with Colbjørnsen Frisch developed a deep mistrust in the market economy and the working of the price mechanism. National economic planning administered and managed by well-trained economists was, in his opinion, clearly superior to the volatility of a market led economy. As a

¹⁹ Schumpeter (1954) p. 1163.

consequence, Frisch as well as Johansen, who was a member of the Moscow oriented Norwegian Communist Party, were great admirers of the Soviet economic planning system, and claimed that it was superior to the market economies of the Western world. They were therefore not easily attuned to other ideas.

Frisch and his supporters questioned the ability of a free market economy to effectively allocate resources. He compared the economist to a social engineer who has a toolkit of new mathematical planning models, a system of detailed national accounts and detailed regulations and controls of the economy. This he believed would help assist the politicians in government and parliament to develop the welfare state.

In the first two decades after the war there was no challenge to the Oslo School and its strong emphasis on economic planning and detailed state governance of economic life. This changed in the 1970's when the basic characteristics of the Oslo School were challenged by academics and by the poor performance of the economy.

The build up of the academic challenge started in 1959, when Karl H. Borch (1919-1986) was recruited to the Norwegian School of Economics and Business Administration, an institution not strongly focused on research. Now this changed, the new competence-building and the international recognition achieved by Borch and his colleagues became a challenge to the Oslo School, and slowly broke its monopoly and its influence on economics and politics. More emphasis was placed on the functioning of competitive markets under uncertainty.

The second challenge came in the 1970's when it became clear to the majority of both economists and politicians that the results from the elaborate system of detailed state planning and governance were rather poor and that economic planning in the Oslo School tradition was not able to secure competitiveness and economic growth of the Norwegian economy. A Government appointed Committee concluded in 1977 that a decentralised market economic system would be better able to tackle the challenges than a centralised economic planning system. This changed the economic policies and the results were that during the 1990's the elaborate system of detailed economic planning and control connected to the Oslo School had come to an end. Today only the use of mathematical models, econometrics and national accounts are left of the Oslo School.

6. Keynes and the Oslo School

As mentioned, John Maynard Keynes, was at the beginning of the 1930's a well known name among Norwegian university economists. *The Economic Consequences of the Peace* from 1919, in which he directed a fierce criticism against the Peace Treaty of Versailles and where he predicted a rather dismissal future for the German and European economies, had made him a rather famous or infamous economist. It did not make things better that his predictions turned out to be true. In addition he had a large production of books, scientific articles, and last but not least pamphlets and newspaper articles.

When The General Theory of Employment, Interest and Money was published in 1936 economics regained its position as a science that could give constructive advice to the politicians on how we could get out of the crisis. The publishing has in posterity been seen as a turning point in the history of economic science. It won from the very beginning an enthusiastic audience, particularly among the young economists, who had been waiting for a prescription to fight the economic crisis. Paul Samuelson expressed it in this way. "Bliss was in dawn to be alive, but to be young was very heaven". Furthermore he claimed that the one under 35 years was "contaminated", but that the one more than 50 never got it. The one in between came gradually to accept the new theory, sometimes without knowing it themselves. England and the US were soon won for the new

²⁰ Kate Crawley [Ed.] (1986): "The General Theory" (1946), The Collected Scientific Papers of Paul A. Samuelson Vol.II, p.1529. Massachusetts.

theory. However, the reaction in Scandinavia was rather cool. The Swedes said straight out that what was important in the book was old news for the Stockholm School. In addition they had many critical comments.

In Oslo there was in the beginning a remarkable silence. With his early emphasis on consumption rather than investment Frisch, and most of his colleagues at the University, had a different approach to what could bring the economies out of the crisis than Keynes and also the Stockholm School. They had both made a point of an increase in investment as the necessary first step to a fight a downturn in the business cycle. In other respects was their thinking quite similar. However there is no evidence that Frisch's policies to fight the crisis had even indirectly been influenced by Keynes. Keynes was, according to Frisch only one of many in "this group of modern money theoreticians who had worked their way to an 'active' view". This implied that Frisch was of the opinion that Keynes, when his General Theory was published, was not such an inventive scholar as Keynes liked to present himself. His stroke of genius, was not his ideas or theories but in his way of presentation, that is how his "thoughts are combined and described". The book was "forcible, pointedly and convincingly", but Frisch added that it "by no means was everywhere clear and précis". 22

Actually, Frisch rather expressed an irritation that Keynes had not caught up with the latest developments in the science to understand that there was relatively little news in the content of the book. Frisch had undoubtedly right when he claimed that an expansive policy was not a new thing. Norwegian university economists had favoured the idea about budget deficits, even with no antecedent saving, a few years before the *General Theory*. What separated Keynes from Frisch was primarily that he developed a macroeconomic theory that supported an expansive policy. This had not been a concern for Frisch. And when the so-called Keynesian revolution was more a theoretical than a political overturning, Keynes can be said to be more original than what Frisch thought.

Frisch scepticism toward Keynes was also connected with their different views on the methodology of economics. Keynes did not think much of econometrics. In addition he undoubtedly sinned against the rules that Frisch had listed for correct model building. In Frisch's opinion Keynes was not explicit enough in his assumptions or sufficient precise in his logical conclusions. He also did not see the same need as Frisch for empirical investigations.

When the reviews of *The General Theory* in foreign journals grew to a literature and the impact also hit the general public the silence of the Oslo economists became intolerable. The situation demanded a reaction. When it finally came it was positive. John Maynard Keynes was created honorary doctor of the University of Oslo in March 1938. The distance between Frisch and Keynes was not greater than that Frisch, on this occasion, cooperated with his colleagues, but it was professor Keilhau and the later professor Erling Petersen, who was in charge of the honorary doctor degree ceremony. On this occasion Professor Keilhau also wrote an article in *Statsøkonomisk Tidskrift.*²³ At the end of this article he touched *The General Theory. "In one way, however, the reception of The General Theory raise a rather interesting psychological problem: Why is it that this book, which is so exaggerated in its critique and which in many of its ways of thinking stop half way, from a huge audience is created with excitement and even in certain circles has won the reputation of being an epoch making pioneering work." As late as 1940 Frisch and Keilhau published a collection of "original texts" from great works in economics. This collection has not a single sentence from <i>The General Theory*, however, it contains a section from a *Treatise on Probability* which Keynes published in 1921. They were perhaps of the opinion that this work was his most valuable contribution to economics.

It was therefore other economists than Frisch that introduced Keynes to the students at the University of Oslo. To some degree it was the students themselves that had started to read *The General Theory*, but University lecturer Erling Petersen started to lecture on the book already in

²¹ Quoted from Nordvik (1977) p.315.

²² Frisch (1947): Noen trekk av konjunkturlæren (Some elements of the business cycle theory) s.56.

²³ Their evaluation of Keynes is printed in *Statsokonomisk Tidsskrift* 1938.

1937. In 1948 he published, based on his lectures, his memorandum from the Institute of Economics; *Hovedtrekkene i Keynes General Theory* (The main principles of Keynes 'General Theory'). Here he stressed that; "Keynes theory was primarily a theory of employment. Therefore it has also been a theory of no employment or unemployment". Petersen's memorandum was used by students until the end of the 1960's.

Frisch did not teach on Keynes theory at the University of Oslo, but in a preface to a memorandum written by his colleague Kreyberg from 1961 he wote:

"In the spring of 1957 I should give a series of lectures on economic planning in Holland, it occurred to me that it could be useful to bring with me some notes on Keynes theory in case it, beside the more thorough technical oriented lectures on planning, could be requests for some popular lectures on his theory. I had very little time and was happy when Kreyberg on the spot made some excellent pencil notes, which I could have in my pocket if needed. As it turned out there was no need for the notes, however they accompanied me on several trips to Cairo where I should give advice on economic planning."

So at last he had come to the conclusion that a presentation of Keynes theory could be valuable for the students of economics.

In his lectures in 1957 and 1958, on economic policy, University lecturer Bjørn Thalberg discussed parts of Keynes' *General Theory* in his use of Alvin Hansen's textbook *Monetary Theory and Fiscal Policy*. He found that his students had a need for, and actually also demanded, an exact analytical description of the main points in the book. His lectures was therefore published as a memorandum from the Institute of Economics in 1959 and used as a text for the students for the next 10-15 years.

During the first half of the 1960's Professor Leif Johansen lectured on public finance. These lectures he published in two volumes as *Offentlig okonomikk* (Public Economics) in 1965.²⁴ This book became for the next two decades a standard textbook in public finance for Norwegian students of economics. Strangely enough, given Johansen's political views and his emphasise on central economic planning, he decided to write the book "within the framework of macroeconomic models of the Keynes type".²⁵ With this book Keynes and his economic theory had won a secure place in the teaching of economics for Norwegian students. These students, according to Berg & Hanisch (1984), viewed macroeconomics and Keynes models as the same.²⁶

7. The Oslo School and Keynes on Econometrics

The Econometric Society was established in 1931, with Frisch as one of its founders. Two years later he became the first editor of the association's journal *Econometrica*, a position he held for the next 20 years. In the statutes of the association it is stated that it should work for "the advancement of economic theory in relation to statistics and mathematics". Although Frisch was one the founders of the association and did quite a lot of work to advance this field he can, according to Berg & Hanisch (1984), not be said to be an econometrician if today's definition is used. He worked only sporadic on proper econometric problems, which are the integration of economic theory and data with the assistance of recent mathematical statistics. Frisch left these problems first of all to be solved by Haavelmo. He had carried out applied econometric work before the war at both the Institute of Economics at University of Oslo, and at University of Aarhus in Denmark, where he was a reader in the academic year 1938-39. During his stay in the US from 1939 until 1947, where he also worked for the Cowles commission, his main emphasize was theory and questions of methodology. His most important works from this period were; *The Inadequacy of Testing Dynamic Theory by Comparing Theoretical Solutions and Observed Cycles* (1940), *The Statistical Implications of a System of Simultaneous Equations* (1943) and *The Probability Approach in*

²⁶ Bergh & Hanisch (1984) p. 218.

²⁴ A couple of years later these volumes was translated to English and published as *Public Economics*, North Holland Publishing Co. Amsterdam.

²⁵ Johansen (1965) p. 23.

Econometrics (1944). All three were published in Econometrica. The last was his doctoral dissertation. As a result of his work there he was recognized as one of the worlds leading econometrician. The Dutch Jan Tinbergen wrote that; "Dr. Haavelmo is one of the best experts in statistical analysis of econometric problems".

Haavelmo fought also against Keynes and others who had expressed views that mathematical statistics was unfit for economic analysis. One could almost get the feeling, said Haavelmo that Lord Keynes had; "a secret knowledge of some other, different method that is capable of solving these problems which statistical inference, allegedly, cannot answer; that the introduction of probability terms does violence to the nature of economic facts". Haavelmo claimed that it was not "dangerous" to treat economic variables as stochastic variables. Actually this was the only way to formulate meaningful hypotheses in relation to facts and "these notions are precisely the tools needed for an objective and intelligent discussion of such questions as those of Lord Keynes quoted above". ²⁷

In the years 1938-39 there was a debate between Keynes and Tinbergen about logic and the use of econometrics. In this debate Keynes had strongly hinted that Tinbergen had gone too far in his use of mathematical statistics:

"The worst of him is that he is much more interested in getting on with the job than in spending time deciding whether the job is worth getting on with. He so clearly prefers the mazes of arithmetic to the mazes of logic, that I must ask him to forgive the criticisms of one whose tastes in statistical theory have been, beginning many years ago, the other way around." 28

Keynes probably referred to his own book A Treatise on Probability from 1922. However, Haavelmo²⁹, was of the opinion that Tinbergen and other econometricians did not go far enough and he came up with many proposals in this direction, both critical and constructive ones. The most important one was probably his demonstration, of what at that time was accepted practise, that to estimate parameters in each relation independent of the other relations, on the whole, gave uncertain, skewed and inconsistent estimates. He introduced in stead what later was called the simultaneous equation method. Tinbergen characterised this work in the following way:

"The chief points is that, in order to test statistically a system of simultaneous equations, one cannot use the method of least square for each of the equations separately. Dr. Haavelmo showed that the tacit assumptions behind such a procedure are in fact contradictory to each other. He developed a new method and showed that even if one is interested in only one equation between variables which are related by more than one equation, it is generally not permitted to use the old least square methods".

There is no doubt that Keynes became increasingly sceptical to the emphasis that was put on mathematical and statistical analysis by economists in the northern part of Europe. He himself became more and more involved with politics.

8. Keynes, the Oslo School and the Market Economy

John Maynard Keynes presented in his early writings and finally in 1936 with his *General Theory*, a third road as an alternative to socialism and fascism, an active state within the framework of a market economy with a democratic constitutional government. His main focus was the activity level in the economy as a whole. To what extent is the existing production possibilities utilised? This problem, the so called 'capacity problem' he treats thoroughly. His famous book is, like any other theory, not general in the sense that it is relevant regardless of the questions asked of institutional conditions or market forms. It is clear that Keynes objective is to analyse the 'capacity problem' in a market economy such as the one in England or similar places in the interwar period.

²⁷ Tinbergen in his evaluation of Haavelmo's application for professorship. University of Oslo yearly report 1947-48

²⁸ Keynes, John Maynard (1939): Professor Tinbergen's Method. The Economic Journal 1939, p. 559.

²⁹ Haavelmo, Trygve (1943): *Statistical testing of business-cycle analysis*. The Review of Economics and Statistics, vol. 25, No 1 pp 13-18.

He maintained that a decentralised market economy had many good properties which it was important to take care of. However, it had all the same weaknesses and Keynes had reached the conclusion that it was necessary with major changes and improvements in the capitalist house to be able to win over the economic crisis. Especially he meant that the market economy was unstable unless someone stabilised it. In a decentralised market economy there can not be found a mechanism that automatically make sure that total demand has the right size to secure full employment. He therefore rejected the invisible hand in this context. Sometimes the demand will be too high and sometimes it will be too small. Business cycle researcher had, according to Hanisch et al (1999), for a long time suspected this but Keynes succeeded to a greater extent than earlier economists to give a convincing theoretical explanation.³⁰

It has been said about Keynes that he saved capitalism or the market economy and, according to Søilen (1998), he would probably have been flattered by such an allegation.³¹

Frisch had in the beginning of the 1930's supported a market economy and he had stressed the importance of private initiative. However, his cooperation with Colbjørnsen led him to change his mind and from the middle of the 1930's he and his Oslo School became increasingly sceptical to the market system as a method for allocating resources and distribute goods and services.

How Frisch's views changed is clear from a thirty year correspondence between Frisch and Trygve J. B. Hoff (1895-1982), the editor of the Norwegian liberal economic journal *Farmand*. Their exchange of letters began in 1935 and continued, with some interruptions, until at least 1964. At the end of the thirties, beginning of the forties, Frisch was convinced that the market economic system had utterly failed. He explained his position in a letter to Hoff at the end of 1941:

"Personally, I believe that we enter a period where more developed forms for industrial regulations will come to prominence. They are both unavoidable and, in my opinion, correct as countermeasures against the disproportional conditions that have developed. The grotesque outcomes we had in the depression of the 1930s - conscious destruction of commodities, permanent unemployment and stationary machinery - was, I would argue, mainly caused by certain 'individualistic' features in our economic system."

Hoff refuted this statement quite coarsely.³³ The economic journal Farmand was closed during the Nazi occupation but reopened after the liberation. Here Hoff as editor fought fiercely, but in vain, against the Oslo School and the centrally planned economic system that were established in Norway after the war.

As pointed out in a previous section the graduates from the new study programme in economics moved into and took over the government offices. Here they built up a detailed regulation system that took over the role of the pre war market economy. When the Minister of Finance Erik Brofoss presented the national budget for 1947 to the Parliament he explained the reason for the new system:

"Man has through scientific and technological progress managed to free itself from the violent forces of nature. They have managed to break the strings that nature has laid over human lives. It would be a step towards increased freedom to be able to free ourselves from the blind submission to the chances in the economic life, which for each individual looks like the work of the forces of nature. We have to make ourselves master of the economic forces instead of being ruled by them." ³³⁴

The government should therefore free the nation from the blind economic forces. To do this he stated that; "a regulated economy is necessary in a modern society". As a consequence Norway abolished the market economy.

³² National Library: Letter collection No 761B 10.11 1941

³⁰ Hanisch et al (1999) p. 96.

³¹ Søilen (1998) p. 92.

³³ National Library: Letter collection No 761A 22.11 1941.

³⁴ The Paliament Gazette 1947, p. 17897

Whenever someone argued in favour of a free market economy with free trade Frisch took up the lance and rebuked their statements in numerous newspaper articles. Here it is enough to mention that he in an article, in the newspaper Arbeiderbladet in 1956, entitled Farlige forenklingstendenser i den økonomiske politikken (Dangerous tendencies of simplification in economic policy), strongly advocated planning in stead of a free market economy. The year after he wrote an article in the newspaper Aftenposten, entitled Kjetterske meninger om frihandel (Heretic opinions on free trade). If the western democracies persist in basing their economy on the free market they will soon be ousted by the eastern countries who now prepare themselves for an expansion under full utilization using rational and flexible economic planning.

The kind of economic planning that Frisch now advocated was built upon macroeconomic planning and detailed economic regulation of the economic life. Although he still talked about the necessity of intellectual freedom he became a great admirer of the Soviet economic planning system. He expressed this view in a letter to Hoff in 1958:

"The depression that the USA (and partly the other western countries) suffers from at present is, in my opinion, further proof of the technical inferiority of a free market economy. It is grotesque that the USA is happy if the national product does not sink when one considers that the Soviet Union has a secure and free business cycle growth of seven or eight per cent each year."³⁷

In a later letter he revised these numbers to claim that the economic growth in the Soviet Union was about ten per cent each year! Frisch defended what he called "a rational form of economic planning" for the rest of his life and claimed that it was superior to a market economy.

As mentioned in a previous section in the first two decades after the war there was no challenge to the Oslo School and its strong emphasis on economic planning and detailed state governance of economic life. However, this changed in the 1970's when the basic characteristics of the Oslo School were challenged by academics. The poor performance of the economy further questioned the validity of the Oslo School's theory. In 1979 the *Committee for Industrial Growth*, produced its White Paper on problems in Norwegian manufacturing industries. The Committee concluded that a decentralised market economy would be better able to tackle the challenges than a centralised economic planning system. According to the historian Harald Espeli (1992), the proposal from this committee is; "the official Norwegian version of the ideological reorientation to the market". The proposal from this committee is:

Although it took some years before all regulations had been abolished there is no doubt the Keynesian paradigm emerged as the preferred theory compared to the approach of the Oslo School.

-

³⁵ Arbeiderbladet December 10th 1956.

³⁶ Aftenposten March 11th 1959.

³⁷ National Library. Letter collection No 761B 11.08 1958.

³⁸ NOU 1979: 35 Structural Problems and Growth Potential in Norwegian Manufacuring Industries.

³⁹ Espeli (1992) p. 191

References

Andvig, Jens Christopher (1986): Ragnar Frisch and the Great Depression. Norwegian Foreign Policy Institute, Oslo.

Bergh, Trond og Tore J. Hanisch (1984): Vitenskap og politikk. (Science and politics), Aschehoug, Oslo.

Bjerkholt, Olav (2000): A turning point in the development of Norwegian economics the establishment of the University Institute of Economics in 1932. Memo 36 from the Institute of Economics, Oslo.

Colbjørnsen, Ole and Axel Sømme (1933): "En norsk 3-års plan" (A Norwegian 3-year plan)

Colbjørnsen (1933): Hele folket i arbeid, (The whole population at work), Oslo.

Colbjørnsen (1933): Planøkonomi og Socialisering, (A planned economy and socialization), Oslo.

Edvardsen, Kåre (2001): Ragnar Frisch: An annotated bibliography. No 4/ N 2001, Ragnar Frisch Center for Economic Research. University of Oslo.

Eriksen, Ib, Tore Jørgen Hanisch and Arild Sæther (2008): The Rise and Fall of the Oslo School. Nordic Journal of Political Economy, Oslo.

Frisch, Ragnar (1930): What is Economic Theory? Unpublished note, box 12.. Frisch- Archive, Institute of Economics, University of Oslo.

Frisch, Ragnar (1932): Konjunkturene (The business cycles). In Keilhau et al 1932.

Frisch, Ragnar (1934): Circulation Planning: Proposal for a national organisation of a commodity and service exchange. *Econometrica* Vol.2. pp. 258-336 and 422-435.

Frisch, Ragnar (1946): Noen trekk av konjunkturlæren (Some elements of the business cycle theory). Aschehoug & Co. Oslo.

Frisch, Ragnar (1933): Sparing og cirkulasjonsregulering (Saving and circulation regulation), Oslo.

Frisch, Ragnar (1932): Statens plikt til cirkulasjonsregulering (The government's obligation to circulation regulation). Published as a memo from the Institute of Economics, January 11th 1951.

Gjedrem, Svein (2010): Schweigaard-forelesningen (The Schweigaard Lecture), http://www.norges-bank.no/templates/article____77285.aspx.

Hanisch, Tore Jørgen and Even Lange (1986): Veien til velstand (The Road to Prosperity). University Press, Oslo.

Hanisch, Tore Jørgen, Espen Søilen, Gunhild Ecklund (1999): Norsk økonomisk politikk i det 20. århundre (Norwegian economic policy in the 20th century), Høyskoleforlaget, Kristiansand.

Haavelmo, Trygve (1940): The Inadequacy of Testing Dynamic Theory by Comparing Theoretical Solutions and Observed Cycles. *Econometrica* Vol. 8, No. 4 pp. 312-321.

Haavelmo, Trygve (1943): The Statistical Implications of a System of Simultaneous Equations *Econometrica* Vol. 11, No. 1, pp. 1-12.

Haavelmo, Trygve (1943): Statistical testing of business-cycle analysis *The Review of Economics and Statistics* Vol. 25, No. 1, pp. 13-18.

Haavelmo, Trygve (1944): The Probability Approach in Econometrics. *Econometrica* Vol. 12, Supplement, pp. iii-vi+1-115.

Johnsen, Leif (1965): Offentlig Økonomikk (Public Economics), University Press, Oslo.

Keilhau, W., Wedervang, I., Frisch, R. (1932): Verdensøkonomien i Efterkrigstiden (The World Economy in the Post War Period). Universitetets radioforedrag. Serie B Nr. 6. Aschehoug & Co, Oslo.

Keilhau, Wilhelm (1938): John Maynard Keynes. Statsøkonomisk Tidsskrift. Pp. 81-98. 52 årgang. Oslo.

Keynes, John Maynard (1913): Indian Currency and Finance. Macmillan & Co., London.

Keynes, John Maynard (1920): The Economic Consequences of the Peace. Macmillan & Co., London.

Keynes, John Maynard (1921): A Treatise on Probability. Macmillan & Co., London.

Keynes, John Maynard (1922): A Revision of the Treaty. Macmillan & Co., London.

Keynes, John Maynard (1923): A Tract on Monetary Reform. Macmillan & Co., London.

Keynes, John Maynard (1930): A Treatise on Money. Two volumes. I. The Pure Theory of Money. II. The Applied Theory of Money. Macmillan & Co., London.

Keynes, John Maynard (1931): Essays in Persuasion. W. W. Norton & Co. Inc., New York

Keynes, John Maynard (1936): The General Theory of Employment, Interest and Money. Harcourt, Brace and Company, New York.

Kreyberg, Hans Jacob (1961): Oversikt over Keynes-modellene. (A survey of the Keynes-models), Memorandum from Institute of Economics, University of Oslo.

Munthe, Preben (1995): Ragnar Frisch, Ole Colbjørnsen og Arbeiderpartiets kriseplaner. Norsk Økonomisk Tidsskrift, Vol. 109, pp. 275-302.

Munthe, Preben (1999): Populister og originale økonomer. (Populists and eccentric economists). Tano Aschehoug, Oslo.

Nordvik, Helge W. (1977): Krisepolitikken og den teoretiske nyorienteringen av den økonomiske politikken i 1930 årene. *Historisk tidsskrift*, Oslo.

Petersen, Erling (1948): Hovedtrekkene i Keynes' "General Theory". – Keynes-læren og dens betydning for den aktuelle økonomiske politikk. (The main principles of Keynes 'General Theory' – Keynes theory and its importance for present day policy.) Næringsøkonomisk forskningsinstitutt, Oslo.

Schumpeter, Joseph A. (1954): History of Eeconomic Analyses. Oxford University Press, New York.

Søilen, Espen (1998): Fra frischianisme to keynesianisme (From Frischianism to Keynesianism), Agder University College, Faculty of Economics and Social Sciences, Kristiansand.

Thalberg, Bjørn (1959): En analytisk presisering av Keynes' "General Theory". (An analytical clarification of Keynes' Gerneral Theory). Memorandum from Institute of Economics, University of Oslo.

Vogt, Johan (1961): Kristiania Hypothek- og Realkredit-Bank 1886-1961. Nasjonaltrykkeriet, Oslo.