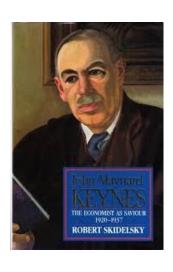


Who is the most influential economist today regarding monetary policy?







Knut Wicksell

His "cumulative process" is the theory behind inflation targeting – the modern approach to central banking.

The institutional framework: An independent central bank, a paper standard, a floating exchange rate and a pure credit economy.

The goal of monetary policy: A constant rate of inflation The main instrument: The policy rate of the central bank

Today: Wicksell is the father of inflation targeting In the 1930s: Wicksell was the father of price level stabilization

KNUT WICKSELL (1851-1926)

Professor in Lund 1901-1916

Geldzins und Güterpreise published in 1898. (Interest and Prices 1936)

Profound influence on Swedish monetary theory and policy

Sweden adopted price level stabilization as the rule for the Riksbank in September 1931



When Sweden left the gold standard on September 27, 1931, one week after the Bank of England had taken the same step, the Swedish government (Minister of Finance Felix Hamrin) declared:

The aim of Swedish monetary policy should be to stabilize the domestic purchasing power of the Swedish krona with available means.

Sweden – the first and so far the only country with such an explicit goal for monetary policy.

The Riksbank searched for advice on price stabilization in October 1931

The Riksbank under Ivar Rooth turned to three economists, Gustav Cassel, David Davidson and Eli Heckscher, with a questionnaire mailed on October 9, 1931.

This step started a process involving seven key economists.

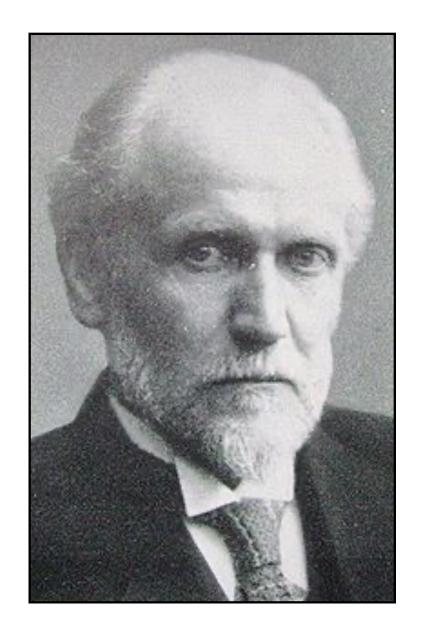
GUSTAV CASSEL (1866-1945)

World famous economist in the 1920s. Adviser to the League of Nations. Known today for his PPP-theory.

Published about 1500 op-eds

Cassel wrote the declaration of 1931 for the government.

65 years of age in October 1931



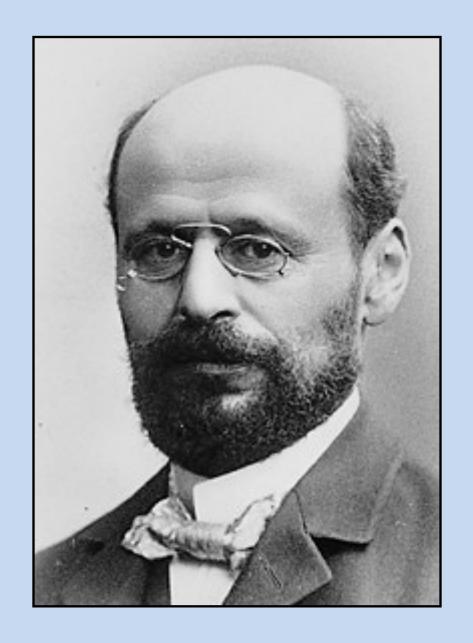
DAVID DAVIDSON (1854-1942)

Professor in Uppsala since 1889. Founder, owner and editor of *Ekonomisk Tidskrift*.

Since 1899 Davidson argued with Wicksell about the proper rule for monetary policy. Davidson's rule: the price level should move in inverse proportion to productivity (growth).

(The program of 1944)

76 years in October 1931



ELI HECKSCHER (1879-1952)

Extremely hardworking and productive economist, economic historian and policyadvisor.

Know for the Heckscher-Ohlin theorem in international trade and for his work on Mercantilism of 1935.

52 years of age in October 1931



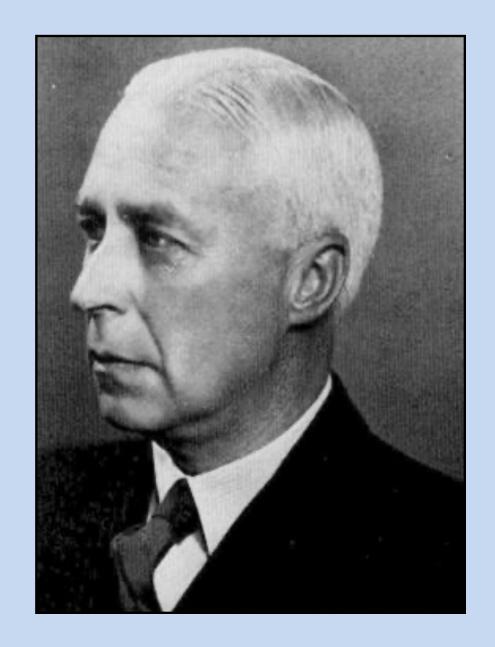
ERIK LINDAHL (1891-1960)

Thesis on Lindahlpricing of public goods in 1919 in Lund.

Inspired by Wicksell and Davidson. Books on monetary rules.

Advisor to the Riksbank in the 1930s. Devoted advocate of price level stabilization.

39 years in 1931



DAG HAMMARSKJÖLD (1905-1961)

Working on his thesis on business cycle fluctuations in the early 1930s.

Recruited by Heckscher to construct the new consumer price index of the Riksbank in 1931.

Secretary general UN 1953-1961. Posthumously Nobel Peace Prize.

26 years in October 1931



Ivar Rooth (1888-1972)

Active in the Liberal Party.

Head of the Riksbank 1929-1948. Resigned 1948 in protest against the policy of low interest rates requested by the Labour Government.

Managing director of the IMF 1951-1955.

42 years in October 1931



IVAR ROOTH

GUNNAR MYRDAL (1898-1987)

Student of Cassel. Thesis 1927 inspired by Wicksell. A socialist planner and institutionalist. *An American Dilemma* 1944 and *Asian Drama* 1963. Applications of Wicksell's cumulative process. Enormous self-esteem. "There has been three great economists in world history...

Nobel Prize 1974 shared with Hayek.

Age 33 in October 1931



BERTIL OHLIN (1899-1979)

Student of Cassel and Heckscher. Thesis 1924 on international trade. Famous debate with Keynes 1929 on German reparations. Presented the Stockholm school of macroeconomics in 1937 – a theory ahead of and at par with *The General Theory*.

Nobel Prize in 1978 shared with Meade.

Age 32 in October 1931



Unique group of economists in Sweden in 1931

No other country had a similiar group of economists working on price level stabilization and on monetary rules in the 1930s.

Why was price level stabilization adopted in 1931 and why were the economists involved?

The background to the 1931 monetary rule:

- 1. Knut Wicksell's rule (norm) presented in 1898
- 2. The inflation and deflation 1914-1923
- 3. Erik Lindahl's books on monetary rules and instruments 1924 and 1930
- 4. The public standing of the economics profession

Knut Wicksell's rule presented in 1898

There is no need to waste words proving how important it is that ... the general level of commodity prices, remains as stable and constant as possible.

Wicksell's cumulative process: a pure credit economy and a paper standard, two interest rates, the bank rate and the natural rate. The price level is determined by interest rate gap. When no gap, the price level is constant.

Wicksell was optimistic: once his theory and his rule were known the price level will be held constant worldwide. It took about 100 years.

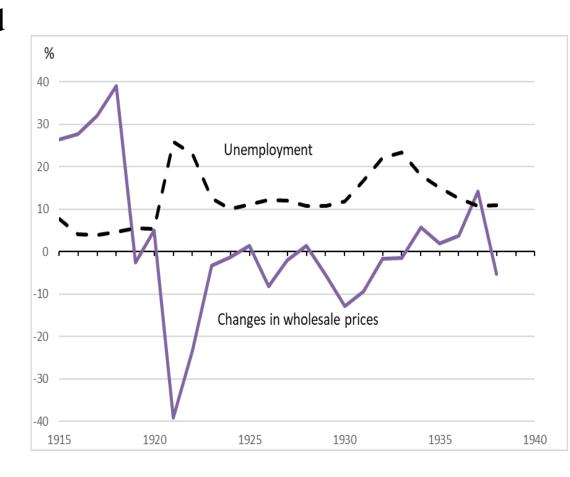
The inflation and deflation 1914-1923

High inflation during World War I set off a lively debate on monetary issues.

Wicksell: A return to **the price level of 1914** through deflation.

Policy-makers wanted a return to **the gold parity of 1914**.

Lesson for 1931: High deflation causes high unemployment.



Erik Lindahl on monetary rules 1924

Two "fundamental principles" for a "rational monetary policy".

- 1. A rule must be adopted and anchored in the constitution.
- 2. The rule should "create a minimum of deviations between the actual and the intended outcome of nominal contracts".

Lindahl preferred Davidson's rule.

The final chapter, "Stable exchange rates or a stable price level", dealt with monetary rules for the open economy. Comparing the stable exchange rates of the gold standard with a price level rule:

• ... the main result ... is that free currencies with fluctuating flexible exchange rates stand out as the ideal for the monetary system of the future.

Lindahl on the instruments under a monetary rule 1930

1. Perfect foresight (theory): Sufficient for the central bank to establish and announce a rule. Expectations will then follow the rule. Uninteresting theoretical case.

2. Imperfect foresight: (real life)

- 1. Central bank policy of "publicity" to influence expectations.
- 2. "Fully secured employment" for the management of the central bank during its mandate.
- 3 A tolerance band of "a few percentage points a year" for the price index of the central bank ("margin of error")
- 4. The short-term rate is the main policy instrument.

The exceptional standing of the economics profession

180

160

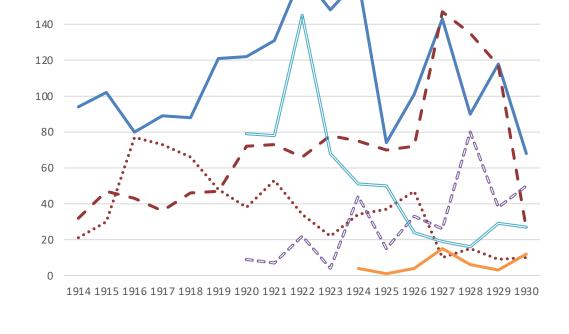
Mentions of Cassel, Heckscher, Wicksell, Ohlin, Myrdal and Keynes in Swedish newspapers 1914-1930

Newspaper articles:

Wicksell 450 (plus 100 unpublished by Jonung-Jonung)

Cassel 1500

Heckscher 300



─ Heckscher ••••• Wicksell □□□ Ohlin ──

Ohlin 2000

The replies of the economists to the questionnaire

Classified documents for 50 years (1931-1981) in the Riksbank archives.

At my second request, I got copies of the reports in the mid-1970s.

The Riksbank questionnaire October 1931

Section I: Selecting the rule for monetary policy?

- A) A fixed exchange rate. To gold or to another currency?
- B) A floating exchange rate (free currency). Which rule and which price index should be selected?

Section II. Which are the proper instruments of monetary policy under a free currency?

Section III. Which other issues should be considered for the paper standard?

Question I A.

I. A. Which should be the international prerequisites for tying the Swedish krona to the monetary systems of other countries?

Answer: The world monetary system has failed due to defective French and American monetary policies towards gold. Gold hoarding has caused world deflation and world depression. Sweden should be lucky leaving the gold standard.

Sweden should not enter international monetary cooperation until the world monetary system is well organized. In the meantime, Sweden should maintain a free currency, that is, a paper standard.

Question I B.

I B. What arguments can be advanced for tying the *krona* to an international currency, principally to a gold standard, and what arguments for tying it to a particular foreign currency?

Answer: It would probably take a considerable time before a lasting gold standard system can be established. In the meantime, tying the krona to the British pound should be seriously considered if Britain found a proper solution to its monetary problems.

Davidson: Avoid the pound.

Question I C and I D.

I C. What basic principles should guide the transition (or return) to such a system [of fixed exchange rates]? Should the exchange rate of the *krona* be set equal to the old parity to gold, or to a particular foreign currency, for example the British pound, or to some other rate, already attained?

Answer: Any return to a fixed rate should take place at the going rate.

I D. Should the eventual transition to this system be carried out as a temporary step or as a single once-and-for-all step?

Answer: One permanent step.

Question I E – the rule for a paper standard

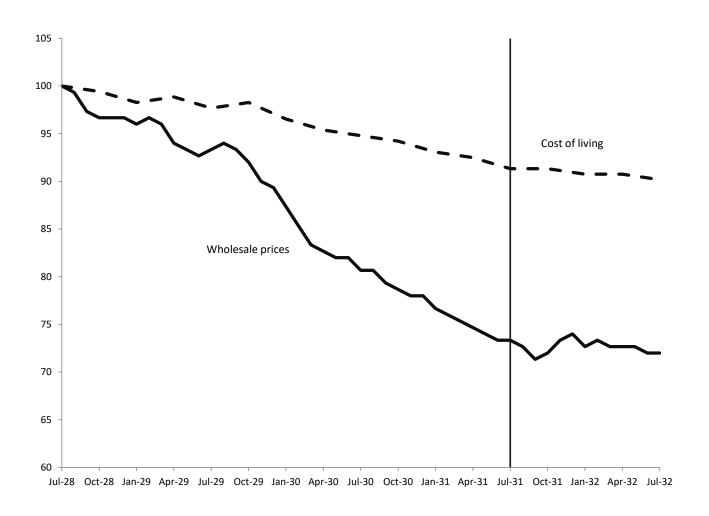
I E. What rules should guide the discount policy and the exchange rate policy of the Riksbank [under a paper standard] until such a transition [to a fixed exchange rate] or return is made?

Answer: The rule should be: Stabilizing the domestic purchasing power of the krona (Heckscher and Cassel).

Heckscher: Wicksell's rule. Cassel: Davidson's rule.

Davidson: Price stabilization is an easy rule to follow but not the best rule. The best conditions for business activity should be the rule. Unclear.

Cost of living and wholesale prices, 1928-1932



Question I F – the choice of price index?

I F. How should the stability of the domestic price level be fixed under current circumstances? Through the use of wholesale or retail prices or of the cost of living, import and (or) export prices, or in any other way?

Heckscher: *The prices of domestically produced goods should be stabilized.*

Cassel: For the moment wholesale prices or the cost of living. But first wholesale prices should be raised to a "normal equilibrium". In due course: a consumer price index

Davidson: Every kind of index should be studied since so little was presently known about this issue.

Question I F – how often should the price index be collected?

IF.

Cassel: Weekly data.

Question I F – which is the proper base period for price stabilization?

Heckscher: The October 1931 price level should be the basis.

Cassel: Mid-1931 cost of living should be the basis.

Question II on the instruments

II. What instruments are available to the Riksbank to achieve the transition to [a paper standard] and the maintenance of the established system?

The discount rate of the Riksbank is the main instrument. Just as under the gold standard.

Heckscher: In addition: Exceptional use of credit restrictions and deposits with the Riksbank

Davidson: In addition: Open market operations as used by the Fed.

Question II on the instruments

II. Is there a need for any powers that the Riksbank currently lacks or currently is not using?

Cassel and Heckscher: All rules pertaining to the gold standard and to the size of the note issue should be abolished at once.

Heckscher: Public announcements about the new policy are important

Question II on the instruments

The exchange rate of the krona:

Heckscher and Cassel: Leave the exchange rate floating for the moment

Heckscher: Later on, the Riksbank might influence the exchange rate

Question III other issues

III. Which other issues should properly be addressed regarding the future organization of the Swedish monetary system?

Heckscher: In the future the paper standard should be anchored in the law although this is a difficult task like the case of the gold standard.

Heckscher: The government and parliament should endorse the new rule

Question III other issues

III. Which other issues should properly be addressed regarding the future organization of the Swedish monetary system?

Heckscher: The Riksbank should employ a young able economist to analyze movements in prices.

Heckscher: Speculation might be threat against price stabilization.

What was missing from the reports?

No mentioning of time lags

No mentioning of tolerance bands/target zones

No mentioning of fiscal policy measues

No mentioning of tariffs, trade restrictions or exchange controls

Why did the three economists agree on most issues?

They were Wicksellians

They were classical liberals - open for unrestricted trade and commerce. Heckscher's book *Mercantilism* just published in Swedish

The world depression had not yet hit Sweden. Unemployment was not an issue

Ohlin: ... I think that an **economic council** in cooperation with a sizeable secretariat and a department of economics and statistics at the Riksbank might be important for the economic policy of Sweden in 1931 and perhaps later as well.

Heckscher felt attacked personally and objected strongly:

I am very sceptical because I think that the right persons will not be selected. ... I think this is the last thing we should do. We should first see if we can find other ways. Here is Hamrin or Rooth. One of them gets a letter from one of us: Why do you not do so or so? Then they can talk to the person they find most appropriate. However, if we have an economic council, they have to listen to it.

Myrdal stepped in with a new argument: A council would foster economic planning (*planhushållning*). The council should have a secretariat working with a statistical department at the Riksbank. The Riksbank need such a department because of the need to synchronize policies that emerged under the new paper standard. During the gold standard it was sufficient to look at the *stock of notes and the gold reserve and the discount rate*.

This is an innovative and crucial argument. A paper standard opens for a new debate: how should the program of price stabilization be coordinated with other government policies?

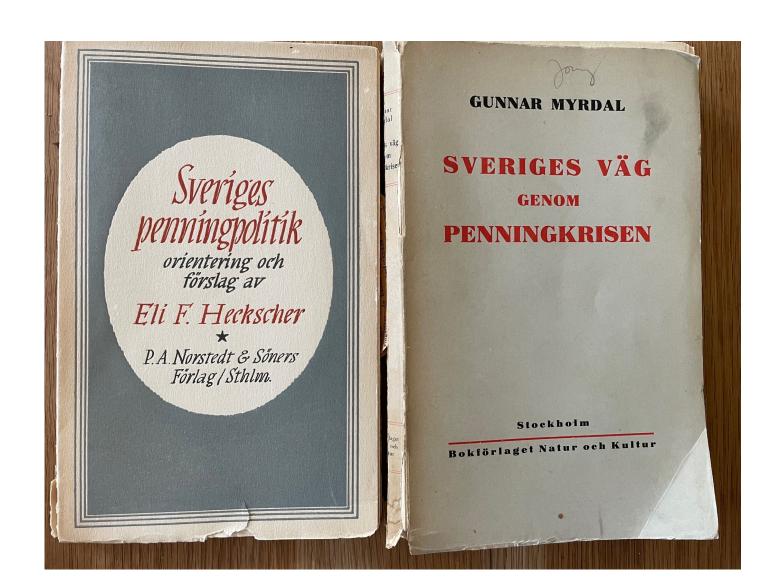
Ohlin supported Myrdal: *I must argue against Heckscher*. If some economists were employed to prepare policy advice, they could do so better than we *who only write our scientific studies and are busy with our teaching*. We can still take initiatives like Heckscher, but *Heckscher is not always at the disposal to push with no limits for new initiatives*.

I think that we in Sweden have had far too much of professors who manage everything and too little of young economists specializing on certain tasks, ... I cannot imagine that this would prevent Rooth ... from having daily conferences with Heckscher about the currency issue.

Heckscher fired back: it was important to distinguish between two fundamentally different tasks for a council. It could serve either as a part of the administration of a planned economy or as a council to compile information to guide policymakers.

If despotism [i.e., the planned economy] is introduced in our country, of course there is a need for more information than if not. A council that should manage industry and commerce of our country is something different from a council that gives information to the constitutional minister of finance or the management of the Riksbank. These two roles must be separated. If this is done, I would be happy, but I must reserve the right to present the drawbacks of the argument.

Two books published in December 1931



Myrdal's message

Myrdal: We need more central planning. Fiscal policy should be made more expansionary. The idea of a balanced budget should be abolished ... "The Riksbank, the government, workers and employers have a deal to make."

"Free competition is dying." We should free us from "the old liberal-democratic fiction" that only government authorities should exercise executive power. Instead, the social partners and the state should cooperate as a prerequisite for a successful monetary policy.

Myrdal's approach ruled Swedish monetary policy from the early 1950s until the financial deregulation of the 1980s.

The evolution of the monetary program 1931-1933

A full-fledged monetary program with an explicit framework concerning responsibility for deciding the goals and the use of instruments emerged. This process took about two years.

The Riksdag in May 1932 stressed that the broad guidelines for monetary policy are established by the Government, not by the Board of Governors of the Riksbank. The goal was a stable purchasing power for the krona.

The Riksbank was made goal dependent. But it was free to decide which instruments to use.

In summer of 1933 the krona was pegged to the pound.

The impact of the reports on the Riksbank

The Riksbank took several actions in the 1930s that were consistent with the recommendations of the three economists.

Dag Hammarskjöld was assigned the task of constructing a consumer price index on October 2 at a meeting where Rooth and Heckscher took part. Erik Lindahl, professor in Gothenburg, was recruited to serve as Hammarskjöld's supervisor.

The index was collected on a weekly basis.

The weekly price index of the Riksbank

The consumer price index of the Riksbank was published regularly in the press with two decimal points every other week.

Comments on the price changes of individual items.

Wholesale prices were also commented on.

Riksbankens prisindex för januari.

Detaliprisindex något höjt genom prisstegring på bilar.

Riksbankens prismaterial för första hälften av januari visar en obetydlig stegring av den genomsnittliga detaljprisnivån för konsumtionsvaror gentemot föregående månad. Nivån ligger nu cirka 0.25 procent högre än i september.

Stegringen hänför sig huvudsakligen till gruppen inventarier och föranledes till största delen av prisstegring på autohar den genomsnittliga tendensen snarast varit sjunkande. Bland födoämnena noteras sänkta priser för bl a. smör, ärter, kött, fisk, apelsiner och bananer, till största delen kompenserade av prisstegringar på potatis, äpplen, grönsaker, havregryn, kaffe, socker, spritdrycker och viner. Bränslegruppen visar mindre prisfall för hushållskol och kokgas. Det genomsnittliga prisläget för grupperna beklädnadsartiklar samt tjänster m. m. är nästan oförändrat, ehuru smärre prisrörelser förekommit i båda riktningarna; lnom den sistnämnda gruppen märkes bl. a, en prisstegring för medicin på cirka

Inom partihandeln är det fortgående prisfallet för fläsk och smör mest anmärkningsvärt. I övrigt visar materialet endast obetydliga prisfluktuationer, av

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rtläsas.		
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	3/1-9/1	10/1-16/
	1982	1932
förhållande till när-		
mast föregående vecka	99.94	100.25
förhållande till sep-		
tornanande tin sep-	100.00	100.91
tember 1931	100.00	100.21

Riksbankens prisindex något ökad i maj.

Detaljprisnivån för konsumtionsvaror med 0,2 proc.

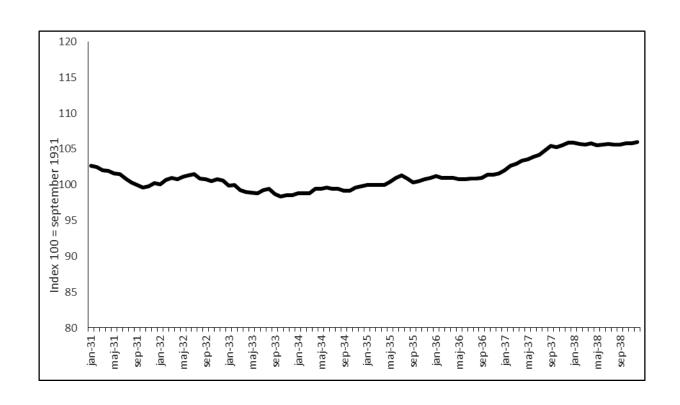
bankens prismaterial visar, att den genomsnittliga detaljprisnivån för konsumtionsvaror under första hälften av maj stigit 0.2 procent.

Inom gruppen födo- och njutningsåmnen märkes en mindre uppgång i priserna kalvkött, fläsk och kaffe, varjämte säsongmässig prisstegring ägt rum för frukt och grönsaker. Smärre prisdäremot ägt rum för smör, potatis och insjöfisk. Inom bränsbensinpriset stigit på grund av den höjda skatten, vilket vägt mer än en samtidig sänkning av vedpriset. För övriga grupper ha prisuppgifter icke inkommit under perioden.

I partihandeln synes pristendensen fortfarande vara svagt vikande.

Konsumtionsprisindextalen utgora:			
		Veckan	
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i förhållande till när-			
mast föregående vecka	100.10	100.10	
i förhållande till sep-			
tember 1931	101.02	101.11	

The consumer price index of the Riksbank, 1931-1938



Three economists on price stabilization in the 1930s

Irving Fisher was most enthusiastic about the Swedish monetary program, viewing it as a model for the United States.

In many letters in the 1930s to policymakers like President Franklin Roosevelt, Fisher pointed "with increasing frequency to the example of Sweden". In his letter to Roosevelt of February 25, 1933, Fisher even included "a chart showing Sweden's stable price level". An updated version was sent to Roosevelt on September 11, 1933, with the following comment by Fisher "It shows that Sweden is still doing her stabilization job well, but that America has fallen down on her reflation job."

The Swedish experiment is "the most important landmark up to this time in the history of stabilization".

Three economists on price stabilization in the 1930s

Erik Lindahl (1934)

A new era in monetary history has started in Sweden. In time, so much knowledge of free currencies would be gathered that the monetary system could be guided 'scientifically', that is according to some rule.

This gathering of knowledge would take a long time, perhaps even a century, but the old system of fixed rates of exchange should not be re-introduced.

Two important lessons:

- 1. A clearly defined goal for the central bank should be established.
- 2. Monetary policy should be based on a price index.

Three economists on price stabilization in the 1930s Bertil Ohlin

"The insufficiency of price stabilization" (1933). An economic policy aiming towards full employment cannot be based on price stabilization. Price stabilization in Sweden had run into more problems than its supporters had expected.

Ohlin (1937) put two goals for economic policy against each other: price level stabilization versus full employment, arguing that the latter was the preferred alternative.

Ohlin advocated full employment by steering investments via the rate of interest and public investments.

What ended the program of price stabilization?

- 1. Unemployment became the burning social issue in the 1930s
- 2. Economists focused on policies to reduce unemployment (Stockholm School of Economics and Keynes)
- 3. World War II brought exchange controls and other controls
- 4. The monetary program of 1944
- 5. The post-war program of the Labour party (Gunnar Myrdal) of government control over investment and interest rates
- 6. The Bretton Woods system and financial repression
- 7. The Riksbank lost its independence and was turned into an "office" under the Ministry of Finance

Why did inflation targeting return in the 1990s?

- 1. Financial deregulation in the 1980s
- 2. The end of the pegged exchange rate of the krona by a financial crisis in 1992.
- 3. Inflation targeting emerged as an alternative, imported via the Bank of Canada not from Wicksell.
- 4. The Riksbank took the initiative for inflation targeting not the Government. The chief economic advisor of the prime minister (AKA LJ) was asked to be silent on the benefits of a floating exchange rate by the Riksbank.

The end of monetary history?

The three economists prepared the first practical guide for inflation targeting in 1931. Still a useful guide.

Wicksell's theory is still the theory of central bank policy across the world.

Swedish monetary history demonstrates which factors that can determine the end of inflation targeting (price level targeting).



Extra slides for post-seminar discussion

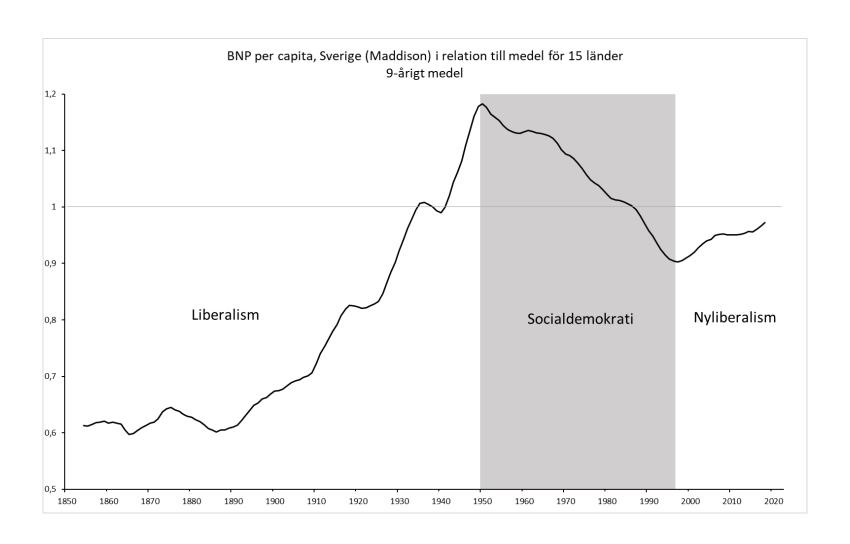
Why this unique combination of exceptional talents in economics around 1931?

Answer 1: Sweden went through a rapid growth period 1870-1950. The modernization required an expansion of higher learning. Young economists were financed to study abroad like Wicksell and Cassel before 1914. This first generation laid the foundation for the next generation of economists.

Answer 2: They were inspired by Knut Wicksell.

Answer 3: A coincidence of history.

Sweden's relative growth rate 1850-2020



Heckscher's proposal for a questionnaire

I. The first option [for Sweden] is a fully independent, national currency, without any fixed relationship to the international monetary system or to the monetary system of any particular country.

....

- B. What rules (*normer*) should be applied for such a currency?
 - 1. If the stability of the present domestic price level is selected as the goal, how should it be determined? Through wholesale prices or retail prices or the cost-of-living, import- and (or) export prices?
 - 2. If not, [through] which other goals and which other rules?

Pages on the Riksbank's consumer price index in its annual reports, 1930 - 1950.

