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It Will Soon Be 1984...¹

*Ingemar Ståhl's pioneering 1979 proposal
to abolish cash to strengthen the Swedish welfare state*

Ingemar Ståhl
*translated by Alan Harkess
with an Afterword by Lars Jonung*

[LINK TO ABSTRACT](#)

It is clearly evident from recent developments that government authorities in many respects have failed to gain full control over the citizens of our country. This is especially notable in relation to the problems that have arisen from the spread of so-called grey and black markets and the associated increase in the number of transactions that have evaded taxation.

This is not just an efficiency problem in the sense that citizens—partly influenced by the tax evasion propaganda from the right-wing bourgeoisie and the ruthless attacks on society's ambitions to construct a gentle People's Home (*folkhem*)² based on long-term government planning—are indulging in activities of dubious economic benefits to society as a whole. It also presents a sizable problem of social justice, equity, and possibly even of gender equality.

Trusting the tax authorities

It is above all a question of creating trustworthy relations between citizens and tax inspectors. The latter should form a group with whom citizens should be

1. Originally published in *Svenska Dagbladet*, December 31, 1979. The use of boldface is as in the original article. All footnotes are by Lars Jonung and are new in this republication. This article also will be included as a chapter in a forthcoming book in English about Ingemar Ståhl (Jonung and Jonung 2020).
2. The term *folkhem*, the people's home, is a metaphor for the Swedish welfare state, prominent in the ideology of the Social Democratic Party since the interwar years. Core elements include ambitious social protection and policies to reduce inequality, a government-run pension system, universal health services, and free access to higher education.

able to discuss their economic problems and seek advice with great openness and trust.

It is of particular importance that the tax inspectors will have the opportunity to both explain and to persuade less solidaristic citizens—undoubtedly a diminishing group—of the necessity of surrendering most of their income to a society which by means of long-range government planning founded on solidarity has a greater capacity to achieve an efficient and equitable use of that income than would have been possible if individuals had been left to use it for themselves.

However, the Swedish tax system has an obvious flaw or perhaps just a blemish. This relates to the failure to register substantial numbers of transactions. Accordingly it is still possible for an individual to conduct a transaction in the black economy without it reaching the eyes and ears of our society.³ A few very simple steps could be introduced to deal with this obvious anomaly. It is a question of making minor administrative adjustments to the existing system rather than introducing a series of new measures.

We all have a personal identification number

Each citizen in Sweden is assigned a personal identification number (*personnummer*) by the tax authorities. Sweden has gained substantial international respect for the leading role that it has played in this field.⁴ All registered companies already have their own organization number (*organisationsnummer*). It is in fact only non-profit organizations, foundations and public authorities that are not required to have an organization number. At most, there are around 100,000 legal persons that do not possess such numbers for identification. It would hardly be a major administrative exercise to put an end to this anomalous situation.

The central principle underlying the proposal that I will outline here, which has undoubtedly occurred to numerous responsible citizens, is that every transaction should be recorded, specifying the seller, the buyer, and the nature of transaction together with the weight and value of the transaction.

Hence it is a matter of providing a computer record of for example, my personal identification number (38 06 02-0859), the organization number of the

3. In public debate in Sweden, the term 'society' (*sambället*) is often used as a synonym for the state or the government. Ståhl adopts this usage here although as an economist he was keen to make a clear distinction between society and government.

4. Sweden introduced in 1947 a system of personal identification numbers covering every citizen. It was the first country in the world to do so. This measure was due to a change in the system of taxation. The Social Security numbers used in the United States are similar to the Swedish system of personal identification numbers although they do not cover every U.S. citizen.

local supermarket (56 78 34-8215) and a code that denotes the nature of the transaction (commodity group 1106, plain bread, weight 0.8 kilo, value 4.20 SEK).⁵ All of this information is currently available.

To simplify matters, it will be advantageous if every citizen is provided with a citizen debit card based on his or her personal identification number.⁶ When used for purchasing, the citizen's personal identification number will be scanned automatically. On grounds of rationalization, most of the cash registers in the supermarkets will be equipped with computers and automatic scanners by 1984.

Once a month, large transaction units like major shops will submit electronic data to the national transaction register of the National Tax Board (*Riksskatteverket*). Smaller transaction units will not have to meet these monthly requirements. It will be sufficient for them to hand in manual lists once a quarter. Normally sellers have the **legal responsibility for registering transactions**. Compulsory registration of transactions is already the case for financial institutions such as commercial banks and to some extent the tax authorities make use of this opportunity.

The registration department of the National Tax Board will consequently be able to carry out monthly computer calculations that will provide information on the expenditures, incomes and changes in net balances for every natural and legal person in Sweden.

Free Saturday sweets!

Naturally, this will involve a relatively large volume of computer data. However, it does not seem to be overwhelming or unmanageable, not least since there are numerous advantages, as we shall see below. In total, it may be estimated that between 30 and 40 billion transactions per year are carried out by natural persons (ten transactions per day per citizen) and approximately the same number by legal persons. It would seem appropriate that small purchases such as evening newspapers and Saturday sweets that cost less than ten crowns would not have to be registered.

As a result of this change, which is actually nothing other than the rationalization of an existing system, the tax authorities will gain a complete overview of not just the incomes of individuals but also of their expenditures and changes in their holdings of assets.

5. The personal identification number of Ingemar Ståhl reveals that he is a male person born on June 2, 1938 in the city of Stockholm.

6. Ståhl proposes here the idea of *medborgarköpkort*, literally a citizen purchasing card. Today, this would amount to a debit card issued to every citizen.

It will be practically impossible to make purchases in the black-market economy since income and expenditure have to balance, allowing for changes in net wealth. In the same way, a stricter control of the value-added taxation will also be enforced.

A new form of taxation

The system also opens up the opportunity for a whole range of new theoretically interesting forms of taxation. A progressive expenditure tax becomes a practical possibility.⁷ The purchase of foreign currency or indeed all types of purchases abroad could become subject to value-added taxation in Sweden. Capital-gains taxation could be made more stringent and be extended to include personal goods and belongings.

It also raises the possibility of working with designated tax rates as part of the foreign exchange rate policy where taxes on imports and exports can be levied and changed to contribute to current-account balance.

Purchases made by foreigners in Sweden need not give rise to any problems. The individual seller would in principle take note of the purchaser's passport number which would automatically harmonize with the national transaction register. Many foreigners will almost certainly be so fascinated by this rational Swedish system that they will apply for temporary citizen debit cards.

A certain amount of leakage due to minor cash purchases would, however, have to be accepted. The expenditure deficit due to such purchases could be managed by means of a tax-free allowance, for example equivalent to the purchase of a newspaper once a day or a bar of chocolate once a week.

Higher quality of life

The benefits of the proposed system will however not just be a matter of improvements to the tax system. There will also be a whole range of positive effects that will be disseminated throughout society. First and foremost, there is the widespread sense of satisfaction, tantamount to an **increase in the quality of life**, arising from the improved cooperation between public authorities and citizens. These improvements will in turn help society to fulfill its objectives in relation to social justice and the idea of the Swedish *folkhem*.

7. A progressive expenditure tax, that is a tax on consumption, was the subject of debate in Sweden in the second half of the 1970's.

Another equally notable effect is that the periodic reports from the national transaction register will allow citizens to improve their economic planning. **In the long run, it is conceivable that further improvements in the quality of life could be achieved by allowing the National Board for Consumer Policies (*Konsumentverket*) to carry out statistical analyses of the data in the national transaction register in order to identify those individuals who could be said to have inappropriate “consumption profiles” from a social standpoint.**

This could give rise to extensive outreach and preventive programs. In many cases, a conversation between the household and the National Board for Consumer Policies or the local municipal consumer board should be sufficient. In more deviant and problematical cases, society may have to intervene with more intensive consumer care measures.

Submission of a consumption plan

After some experience of the system, it would seem appropriate that each household every year submits a **consumption plan**. Once the plan has been approved by the National Board for Consumer Policies (*Konsumentverket*)—following the possible intervention of a consumer adviser or the municipal consumer planning board—the plan can be implemented. Automatic comparisons between outcomes as registered in the national transaction register and the approved consumption plans will indicate at an early stage where discrepancies arise and where appropriate measures should be taken. It is obvious that the national transaction register provides markedly increased opportunities to further the long-term planning of consumption and by extension, also of production.

It is also possible to improve consumer planning in particular designated areas. For example, the National Board of Health and Welfare (*Socialstyrelsen*) has for a long time taken responsibility for the Swedish population’s consumption of bread. The Board has nevertheless lacked the technical means to carry out comprehensive follow-up studies. The national transaction register will be able to deal with this shortcoming. Consequently, there will be no difficulty in attaching a separate code to bread transactions and presenting them separately. Then it will be possible to monitor whether the consumption goal of six to eight slices of bread per day is actually being fulfilled.⁸

8. In 1976, the marketing organization of the Swedish bakery association (*Brödinstitutet*) launched a campaign based on the slogan “The National Board of Health and Welfare wants us to eat 6–8 slices of bread a day.” The campaign gave rise to a heated debate about the involvement of the state in the life of citizens.

The proposed system is also able to ensure that consumers who over- or under-consume will be automatically requested to consult their district health care center, where they will be examined and advised by a team of specialists. (The composition of the team may consist, as it suits the case, of a specialist in primary care, a specialist in metabolic disorders, a medical welfare counsellor, a dietary specialist, a district nurse and a trade union representative from the Municipal Workers Union (*Kommunalarbetarförbundet*)).

The state-run pharmacies in Sweden are already in the process of introducing this type of transaction register. The possibilities of expansion into new areas will allow us to obtain rapidly information about the various side effects of consumption.

In the same way that the 1970s became the decade of the working environment, the 1980s could under the influence of the measures recommended here become a decade characterized by issues related to the consumption environment.

Solving the mystery of milk

The national transaction register opens up unimagined opportunities for research in the social and behavioral sciences. We will be able to compare consumption patterns in different groups and regions. Who drinks milk and why? This question will finally be answered.

The costly, time-consuming compilation of many of our official statistics could be replaced by simple, routine data processing in the national transaction register.

Deductions from the National Supplementary Pension System (ATP)

Tax evasion and property crime will at last become much easier to deal with as a result of the proposed system of a national transaction register. In principle, three types of crime are feasible: an expenditure deficit, an expenditure surplus and non-registered transactions. An expenditure deficit may arise from consumption abroad or black-market purchases (thereby avoiding the payment of value-added tax or at worst using non-taxed labor).

The submission of a travel plan backed up by appropriate documentation should help to deal with the problem of foreign consumption. Swedish tax could

thereby be levied immediately. The presumption made in relation to other types of non-recorded consumption is that they are a criminal offense. In this context, a tax surcharge can be automatically imposed electronically. The charge could be deducted from the individual's capital holdings or ultimately from his or her supplementary pension (*ATP*).⁹

A recorded expenditure surplus arises when an individual has received untaxed foreign income or is in receipt of so-called black income. In this case, a Swedish tax or a tax surcharge will be imposed in the same way as with an expenditure deficit. The only difference will be that the relevant taxes will take the form of payroll charges and income tax.

More police, of course!

Transactions not recorded with the national register are obviously a serious crime. They arise principally when individuals exchange goods or services without a registered payment. Once such trade is discovered, it would have to be punished severely. It is anticipated that this would lead to a certain increase in police surveillance, opening of correspondence and the tapping of telephones. Home visits carried out by specially selected supervisors from the transactions register might also be used.

It must be emphasized however that these control measures will not affect honest, loyal citizens. They are solely directed at actual or suspected tax evaders. There is no reason why this type of measures which are in the interest of society as a whole should not be compatible with the principles of a state governed by law. It is not the aim of the legal system to protect criminals who sabotage the institutional foundations of society.

Cash is criminal evidence

As a result of the steady expansion of electronic surveillance systems, it can be expected that cashless transactions will increasingly become the norm. The purchase of newspapers, sweets and chocolate will continue to exist as exceptions in the little "free circle" outside the transaction registration system. This will also mean that a large cash holding in itself will give rise to suspicion of criminal acts or of criminal intentions. Solidaristic behavior by the citizens will quickly reveal any cash-rich saboteurs of the system of registered transactions.

9. The ATP pension was introduced in 1960 as a part of the state-run pension system.

Other forms of anti-social behavior can also be more readily suppressed by the transaction register system. Criminals who have committed thefts may be more easily detected by irregularities in their patterns of consumption. It is also likely that it would become easier to trace drug addicts. Hence additional research efforts might well be able to identify the income and expenditure profiles that are strongly correlated with various types of criminal behavior. The systematic scanning of individual income and expenditure profiles would also be able to make a marked contribution to the rationalization of police work.

Goodbye to illicit distilling!

The heated debate on keeping a register of the purchase of alcohol would be automatically resolved. At the same time, there would be a certain check on illicit distilling and wine production. A household that purchases bread, sugar, and yeast would immediately raise strong suspicions.

The issues of ‘tax exhaustion’ and tax evasion need no longer act as a brake on the continued growth of the welfare society. What the Khmer Rouge was unable to achieve because of their technological backwardness will be fulfilled by the technical ingenuity and cultural prowess of the Swedish people over the coming five-year period.¹⁰ We have already taken the decisive step by adopting modern computer techniques and personal identification numbers.

As is evident the transaction register system will provide us with a wide range of substantial advantages. It should thus be introduced without further delay. Already 1984 seems too late.



The introduction to Ståhl's original article in Svenska Dagbladet stated that "We must create confidential relationships between the public and the tax inspectors! By 1984 every economic transaction should be registered and the tax authorities would then finally be able to have complete surveillance of everybody."

The article included three illustrations. The first was a photo of a hand holding a citizen debit card in front of a supermarket cashier with the text: "With a few administrative changes we

10. Ståhl is referring here to the policy of Pol Pot, leader of the Khmer Rouge, of abolishing money after taking power in Cambodia in 1975.

can get rid of the obvious anomaly that people can consume whatever they want. A citizen debit card should be introduced at the latest in 1984 in order that the State may finally obtain control over the individual. . . , as Ingemar Ståhl writes in a New Year satire.”

The second illustration shows a pen for scanning price tags with the text “The system of automatic scanning of price-tags which is already in use can easily become the basis of the transactions registration system. The point of the cashier’s pen will be the eye of the State on your consumption.”



The final illustration comprised six pictures of the citizen debit card issued by the Consumption Control Agency for “Ståhl, Ingemar 38 06 02-0859, Consumption area: Lund” with a photo of Ståhl.

About the Author



Ingemar Ståhl (1938–2014) was professor of economics at Lund University from 1971 to 2005. He was strongly engaged in public debate on a vast number of issues like industrial policies, rent control, defense, taxation, health care, and social policy, promoting a market-oriented approach. He introduced public choice, financial economics, and law and economics into the academic curriculum at Lund University. He proposed and designed the Swedish system of student financial support, introduced in 1965. He was a member of the Royal Academy of Sciences, serving on the Prize Committee.

→ [read the afterword by Lars Jonung](#)

Afterword to “It Will Soon Be 1984...”

Lars Jonung¹

Ingemar Ståhl (1938–2014) started his career as an economist in the 1960s by working for a large number of government committees dealing with such issues as higher education, energy, defense, infrastructure investments and the indexation of loans. He proposed and designed the Swedish system of student financial support as an expert for a government committee headed by Olof Palme (who subsequently became prime minister of Sweden). In those days he had close ties with the Social Democratic Party.

Initially, Ståhl was an applied micro-economist well versed in Pigouvian welfare economics and cost-benefit analysis. He made an exceptionally swift academic career, being appointed as professor of economics at Lund University in 1971 at the age of 33. As a young professor in the 1970s, he was fascinated by the rapidly growing public sector in Sweden and the accompanying sharply rising marginal tax rates.

His experience of serving as policy advisor made him increasingly pessimistic about the practical use of welfare economics. Gradually, he adopted and endorsed a public choice approach. In his opinion, the economist at the university should abandon the role of the social engineer and instead serve as an “eye-opener” revealing the political incentives driving economic policies. He introduced public choice in Sweden, by summarizing the subject in popular articles.

He moved towards a market-friendly view. In his opinion, the welfare state had grown too large and should be reduced in size. However, he was pessimistic about the possibility of downsizing the public sector due to its popular support across all parties.

By 1979, Ståhl was a well-known economist in Sweden.² On New Year’s Eve that year he published the article republished above, titled “It will soon be 1984...,” in *Svenska Dagbladet*, a leading newspaper. He acted in the Swedish tradition of preparing an end-of-year, crystal-ball account of what the future may hold.

In his obituary of Ståhl, presented to the Royal Academy of Sciences in 2014,

1. Lund University, 221 00 Lund, Sweden. I have benefitted from comments by Kevin Dowd, David Laidler, Kurt Schuler, Claes-Henric Siven and Geoffrey Wood.

2. For a portrait of Ståhl, see Jonung (2019) as well as Jonung and Jonung (2018; 2020).

Assar Lindbeck described Ståhl in the following way:

Ingemar had an exceptional flair for seeing connections between different phenomena. Most prominently, he had a great capacity to view the problems of society from unconventional perspectives. Conversations with Ingemar were for this reason unusually rewarding.³

Indeed, the 1979 article is a nice illustration of this characteristic of Ståhl. In addition to George Orwell's *1984*, Ståhl found most likely inspiration for his proposal of a cashless economy in the monetary economics of Knut Wicksell, the first economist who analyzed in depth a model for a cashless economy. In *Interest and Prices*, Wicksell (1898) discussed two extreme cases of monetary systems: the pure cash economy, without any credit facilities, and the pure credit economy, with no cash at all.⁴

Ståhl's 1979 satire for abolishing the use of cash preceded by several decades the present discussion of reducing the use of cash, most notably Kenneth Rogoff's 2016 book *The Curse of Cash*.⁵ There are similarities as well as differences between Ståhl's plan and Rogoff's. The main similarity is the aim to reduce tax evasion and criminal activities. This is the first of two major arguments for Rogoff's recommendation that higher-denomination notes should be taken out of circulation as they are used primarily in the underground economy.

As his second reason, Rogoff argues that phasing out cash would allow central banks to use negative policy rates more successfully when framing monetary policy. The public would no longer be able to respond to negative rates by hoarding cash, making negative policy rates more efficient. For obvious reasons, Ståhl did not propose this argument in 1979, a world of high nominal interest rates. However, it would fit perfectly with his view that new types of policy measures can be adopted in a cashless economy such as a progressive expenditure tax, new forms of foreign exchange rate policies—and negative central bank interest rates.

Like Ståhl, Rogoff (2016, 94) also suggests that the government “provides all individuals the option of access to free basic-function debit card/smartphone accounts,” similar to Ståhl's idea of a citizen debit card. Both envision what Rogoff (2016, 98) terms “universal financial inclusion.” They would also allow a “free circle”—the term used by Ståhl—of cash for minor purchases, at least initially. Ståhl recommends a free allowance of up to 10 Swedish crowns, roughly three

3. Personal communication with Assar Lindbeck.

4. For interpretations of Wicksell's pure credit system see, i.a., Bordo and Jonung (1987), Jonung (1979) and Laidler (2006).

5. See Hummel (2017) for a critical review of Rogoff's work with a response by Rogoff (2017); see also Dowd (2019).

to four dollars today, while Rogoff suggests “up to a few hundred dollars or equivalent, perhaps a bit more” (Rogoff 2016, 93). Ultimately, they envisage a cashless or almost cashless economy.⁶

Both of them suggest a period of several years to reduce the use of cash. In Ståhl’s plan, at the most five years are sufficient to hit the deadline of 1984. Rogoff is more cautious, seeing the necessary time span as at least 10–15 years (Rogoff 2016, 92). Rogoff (2017, 166) suggests at least 50 years for the move to an economy with only coins as cash.

Ståhl satirically promotes the all-encompassing social welfare state. Rogoff’s approach focuses on the United States and is more limited in scope. The idea is not to improve the workings of the welfare state but to restrict criminal activities and to advance the efficiency of monetary policy by eliminating cash. Rogoff is not going as far as Ståhl’s central idea of making all transactions traceable and stored electronically by the tax authorities. He adopts a rather partial analysis, although he states “that the overall social benefits to phasing out currency are likely to outweigh the costs by a considerable margin” (Rogoff 2016, 8).

All in all, Ståhl presents a satirical warning of a cashless future where the government has unlimited capacity to monitor the activities of the individual citizen while Rogoff proposes a cashless future of less crime and tax evasion and extended effectiveness of the central bank. Both have the same goal—a better society—although they have different routes to this goal. Ståhl fears that society will become worse off by restricting the use of cash, whereas Rogoff imagines that it would be a better world with less cash.

The article by Ståhl did not induce any comments or debate in the months after it appeared judging from the database of all major Swedish newspapers at the Royal Library in Stockholm. But in the decades since, and particularly in recent years, Sweden has moved more rapidly towards a cashless or less-cash economy than any other country. The volume of cash in circulation has been cut in half since 2007. Many shops and restaurants refuse to accept cash. As cash is used less frequently, crimes linked to cash, such as robbery of banks and of cash-in-transport and taxi robbery, have fallen sharply in the 2010s. No cash-in-transport robbery was reported to the police in 2018. The number of robberies of shops has fallen dramatically.⁷

6. Although Rogoff (2016) is careful in putting his ideas in the context of earlier contributions to monetary economics, surprisingly he pays no attention to Wicksell’s work on the pure credit system. In addition, Wicksell’s analysis in *Interest and Prices* is presently the intellectual foundation of inflation targeting, the common policy strategy of central banks today. When Rogoff (2016) recommends in the second part of his book the reduction of cash to strengthen the impact of negative central bank rates, he is implicitly adopting Wicksell’s monetary framework in phrasing his argument.

7. Statistics taken from the report *Payments in Sweden 2019* issued by the Riksbank. See also Rogoff (2016,

Sweden is likely to be the first nearly cashless society—not through the policy of banning cash as suggested by Ståhl, but by the rapid evolution of new transaction technologies and new payment systems that make cash an inferior alternative. It is a spontaneous process driven largely by market forces rather than direct policy interventions. As a strong proponent of market solutions, Ståhl would have appreciated this process.

In the future, with the general adoption of more advanced payment techniques, the curse of cash is likely to be less of a curse.⁸ The measures recommended by Rogoff may become superfluous if the United States follows the present Swedish route.

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107) on Sweden's move towards a less-cash economy.

8. The case for negative interest rates is weakened by the Swedish experience of such rates in the period 2015–2019. The Riksbank has abandoned this experiment for other reasons than cash preventing an efficient central bank policy.

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About the Author



Lars Jonung is professor emeritus in economics at Lund University. He has served as professor at the Stockholm School of Economics, as research advisor at the European Commission, Brussels and as chairman of the Swedish Fiscal Policy Council. His research is focused on monetary and fiscal policies and on Swedish economic thought. His books include *The Long-Run Behavior of the Velocity of Circulation: The International Evidence* (with M. D. Bordo, 1987); *The Political Economy of Price Controls: The Swedish Experience 1970–1985* (1990); and, as editor, *The Stockholm School of Economics Revisited* (1991); *Bertil Ohlin: A Centennial Celebration, 1899–1999* (edited with R. Findlay and M. Lundahl 2002) and *The Great Financial Crisis in Finland and Sweden* (edited with J. Kiander and P. Vartia, 2009). His email address is lars.jonung@nek.lu.se.

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