

## Economic Freedom in Sweden 1950-2002

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### Introduction

Nowadays there are several indices that attempt to measure different aspects of economic freedom. "The key ingredients of economic freedom are personal choice, voluntary exchange, freedom to compete, and protection of person and property", as Gwartney & Lawson (2003a, p. 5) put it. Such indices have for example been used for analyzing the relationship between economic freedom and economic growth. One index of this kind is called the Economic Freedom of the World Index (EFI).

EFI consists of data from more than 100 countries and generally goes back to 1970, allowing comparisons to be made both between countries and over time. It is divided into five areas; (1) Size of Government, (2) Legal System & Property Rights, (3) Sound Money, (4) Freedom to Trade with Foreigners and (5) Regulation. Each area in turn consists of a number of components and in some cases there is yet another layer of components (see the Appendix, Table A1, for all components). The index is constructed in a way so that a certain maximum amount of economic freedom is given the value 10, while a certain minimum amount of economic freedom is given the value 0. Each of the five areas have equal weight in the overall index, each of the components have equal weight in the respective area and the same holds for the lowest layer of components. If there is a missing value, the weighting procedure takes place simply as if it didn't exist, thus ensuring that the index can be calculated anyway. From the years 1970 to 2000, the index appears in five-year intervals and from then on annually. 1

In this paper I present the results of an effort to create an index corresponding to EFI for the period 1950-70 for Sweden. This index has been named the Swedish Economic Freedom Index 1950-70 (SEFI). By combining it with EFI it is possible to picture the development of the economic freedom in Sweden for the longer period 1950-2002. It turns out that the overall economic freedom in Sweden was rather stable for a long time, then increasing for some time while decreasing lately. Behind this we find that the development of the different components not at all followed this aggregate pattern. In some cases economic freedom has been increasing, while in other cases decreasing. Some components have remained constant as time has passed and some have been more volatile than others. Notably, only in one case has the economic freedom been increasing considerably from an earlier low level of economic freedom.

EFI is an index containing a wide range of statistical information, while SEFI doesn't; SEFI is limited to a smaller amount of components and only for Sweden. This means that important aspects of economic freedom are left out, e.g. important aspects of labor market and business regulations, and this limits the inference. On the other hand, SEFI is calculated annually and is in this aspect richer than EFI of 1970-2000. SEFI often also contains more reliable data for Sweden than the early data in EFI. Nevertheless, a certain amount of caution is required in interpreting the results of the economic freedom in Sweden 1950-2002.

The paper proceeds by presenting the aggregate results of the longer time series. In the following sections the results of the five areas and the components of each of these are presented. Then I make some concluding comments. After the main paper, I provide a descriptive Appendix containing the data and sources.

## SEFI and EFI 1950-2002

Table 1 compares the SEFI to EFI of 1970, showing that SEFI covers 12 out of 16 components included in EFI of 1970 (note that EFI itself of 1970 does not include all the components that are included in EFI for the last couple of years). The perhaps most conspicuous exclusion in SEFI is the whole area covering the "Legal System & Property Rights", but it has simply been impossible to create an index for this area. Note also that two aspects of labor market regulations are excluded, an area particularly relevant for Sweden. Once again, it is due to lack of data.

Table 1 - Comparing SEFI 1950-70 and EFI of 1970 ("x" = included, "-" = excluded)

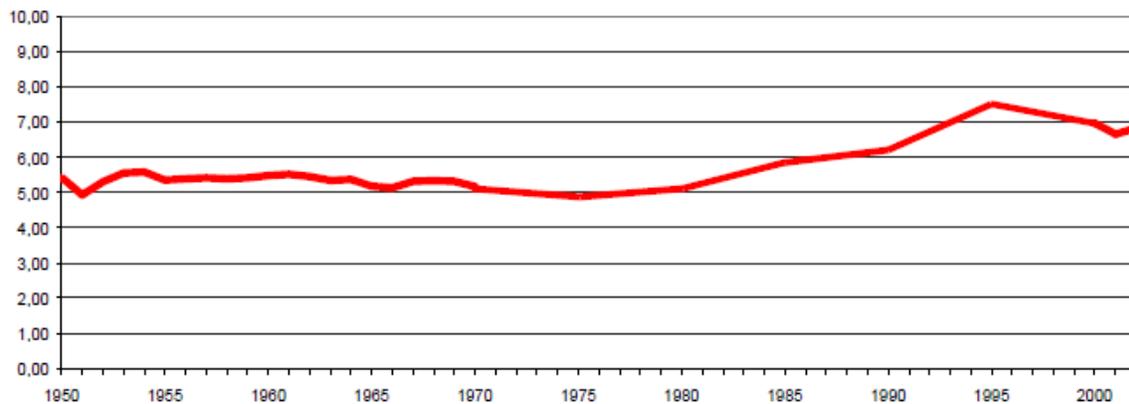
	SEFI 1950-1970	EFI 1970
<b>1 Size of Government</b>		
1A General gov't consumption as share of total consumption	x	x
1C Gov't enterprises and investment as a share of gross investment	x	x
1D Top marginal tax rate		
1Di Top Marginal Income Tax Rate	x	x
<b>2 Legal System &amp; Property Rights</b>	-	x
<b>3 Sound Money</b>		
3B Standard deviation of annual inflation (last 5 yrs)	x	x
3C Annual inflation (most recent yr)	x	x
3D Freedom of citizens to own foreign currency bank accounts (domestically and abroad)	x	x
<b>4 Freedom to Trade with foreigners</b>		
4A Tarrifs		
4Ai International trade tax revenues (% of trade sector)	x	x
4C Actual vs. expected size of trade sector	x	x
4D Difference between official and black mkt exchange rates	-	x
4E International Capital Market Controls		
4Eii Restrictions in Foreign Capital Market Exchange	x	x
<b>5 Regulation</b>		
5A Credit Market Regulation		
5Aiii Extension of credit	x	x
5Aiv Interest rate regulations (leading to neg. rates)	x	x
5B Labor Market Regulations		
5Biii Labor force share with wages set by centralized collective bargaining	-	x
5Biv Unemployment insurance	-	x
5Bv Use of conscripts	x	x

Anyhow, apart from Area 2, SEFI matches EFI of 1970 fairly well. If we put SEFI and EFI together we have an index for 1950-2002. To make the comparison fair, only the 12 components in SEFI are included in the full 1950-2002 index. The comparison is strengthened somewhat by the fact that I have calculated SEFI for 1970 as well. The 1970 values used are those of SEFI since they generally are judged to be more reliable for this year.<sup>2</sup>

Table 2 shows that on an aggregate level, the economic freedom seems to have been fairly constant 1950-80, then increasing somewhat 1980-95, but seems to have been falling somewhat

since 1995. The overall level is, however, rather moderate (by “moderate” I refer to the middle range of the 0-10 scale).

Table 2 – Economic Freedom in Sweden, 1950-2002 (SEFI 1950-70 and EFI thereafter)



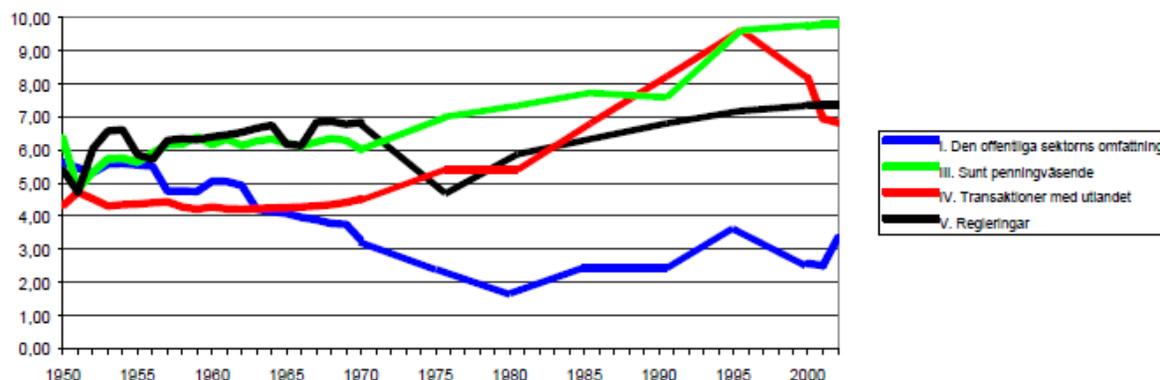
Remark: The table is based on the 12 components included in SEFI.

Sources: 1950-70, own compilation of various sources. For 1975-2002, see Gwartney & Lawson (2004).

This is perhaps an interesting result, but it is not as clear-cut when the five underlying areas are viewed separately, as in Table 3.

We then can observe that the indices of the separate areas not at all have followed the same pattern over time. They all started at a moderate level in 1950 but have since then diverged. The economic freedom has fallen in some aspects while it at the same time has risen in other. It has not been unusual for changes in one direction to be followed by changes in the other direction. Et cetera. This turns out to hold also of the underlying components to the separate areas.

Table 3 – Areas 1, 3, 4 and 5 in SEFI and EFI, Sweden 1950-2002



Remark: The table is based on the 12 components included in SEFI.

Sources: 1950-70, own compilation of various sources. For 1975-2002, see Gwartney & Lawson (2004).

## Area 1 – Size of Government 1950-2002

Gwartney & Lawson (2003) describe this area in the following way:

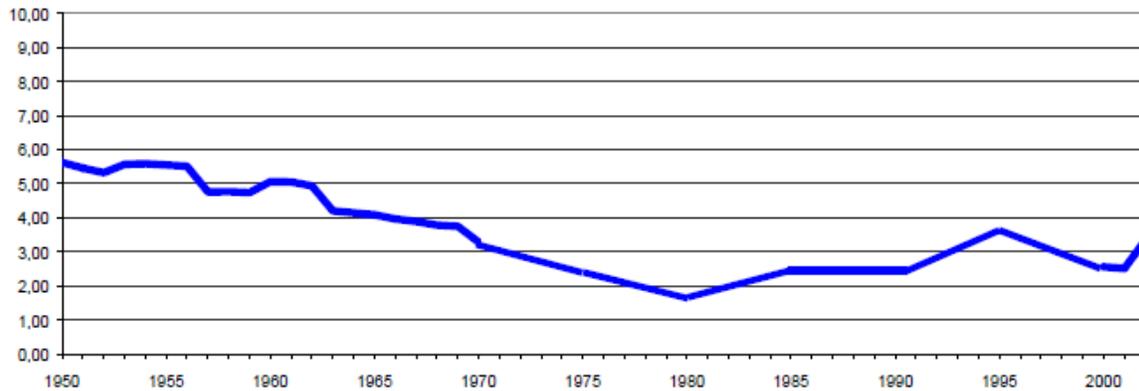
“Area 1 indicate[s] the extent to which countries rely on individual choice and markets rather than the political process to allocate resources, and goods and services. When government spending increases relative to spending by individuals, households, and businesses, government decision-making is substituted for personal choice and economic freedom is reduced.”

A higher degree of government intervention thus implies a lower index. Table 4 shows the index for 1950-2002 (the graph was also shown in Table 3), suggesting that this aspect of economic freedom was moderate in 1950. During the years up to 1980, there was a persistent decline in the economic freedom as the size of government grew. During the 1980-1995 period the index increased slightly, but since then the development has reversed somewhat. The overall level is still considerably lower than the already moderate level of 1950.

In SEFI there are three underlying components to this category, exactly as in EFI of 1970. These are shown in Table 5. Each of the components has equal weight in the Area 1 index.

The first component (1A) measures the government share of the overall expenses on consumption. In 1950, the level of economic freedom was in no way high in this respect and there is a considerable decrease in the level up to 1980, when it rose slightly for a number of years. After 1995 the index has fallen again. The overall level today is generally much lower than the 1950 level and even significantly lower than the 1970 level.

Table 4 - "Area 1 Size of Government", Sweden 1950-2002

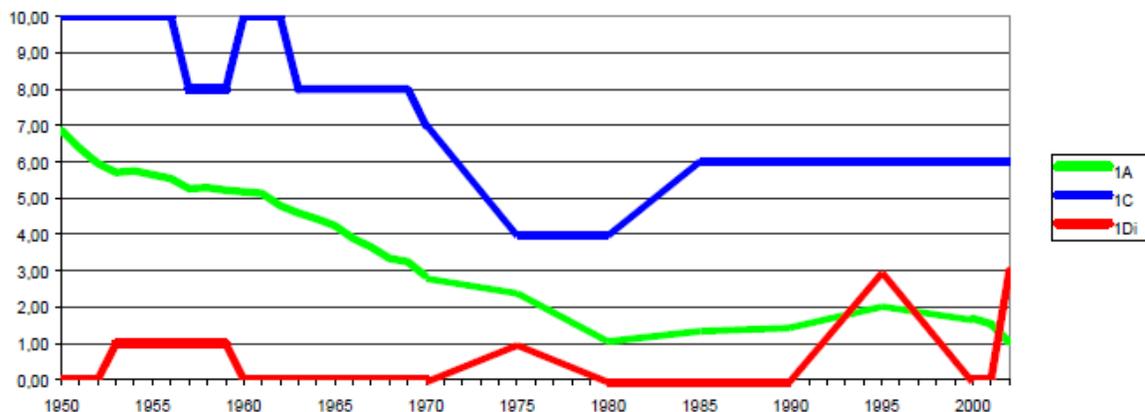


Remark: The table is based on the 12 components included in SEFI.

Sources: 1950-70, own compilation of various sources. For 1975-2002, see Gwartney & Lawson (2004).

When it comes to the second component (1C), the decline is not as sharp. This component measures the government and government enterprises' share of overall expenses on investments. The decline in economic freedom followed from previous high levels to a moderate level. The bottom was hit in the 1970's and has since then settled on a higher but still moderate level. 3

Table 5 - SEFI components in "Area 1 Size of Government", Sweden 1950-2002



Remark 1: Area 1A - General government consumption spending as a percentage of total consumption, Area 1C - Government enterprises and investment as a percentage of total investment, Area 1Di - Top marginal income tax rate (and income threshold at which it applies). Remark 2: The table is based on the 12 components included in SEFI.

Sources: 1950-70, own compilation of various sources. For 1975-2002, see Gwartney & Lawson (2004).

The final component measures the relation of marginal tax rates to economic freedom. The marginal taxes have been very high all through the period, judging by the fact that the index only reaches up to a value of 3 at best. 4

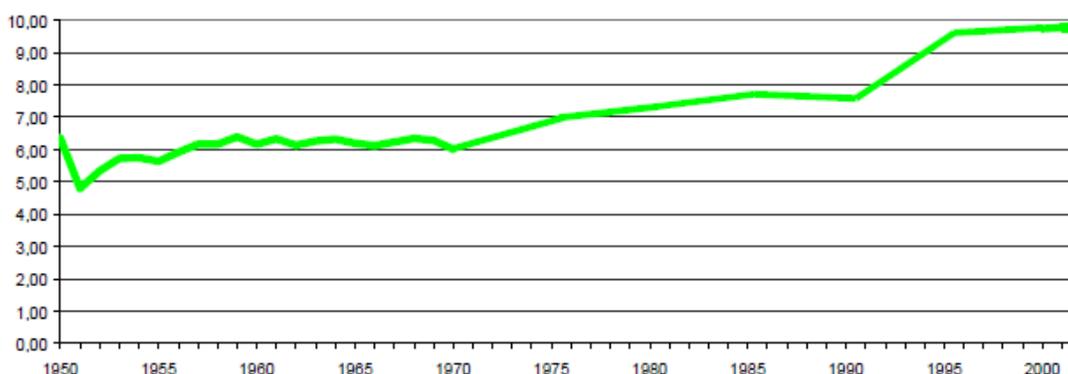
## Area 3 – Access to Sound Money 1950-2002

Gwartney & Lawson (2003) describe this area in the following way:

“Money oils the wheels of exchange. An absence of sound money undermines gains from trade. [I]nflation is a monetary phenomenon, caused by too much money chasing too few goods. [...] Sound money is essential to protect property rights and, thus, economic freedom. Inflation erodes the value of property held in monetary instruments.”

Table 6 shows the index for 1950-2002 (the graph was also shown in Table 3). It turns out that the economic freedom in this regard was quite stable at a moderate level between 1950-1970. Since then there has been a steady increase up to the high level of the 2002 index.

Table 6 – “Area 3 Access to Sound Money”, Sweden 1950-2002



Remark: The table is based on the 12 components included in SEFI.

Sources: 1950-70, own compilation of various sources. For 1975-2002, see Gwartney & Lawson (2004).

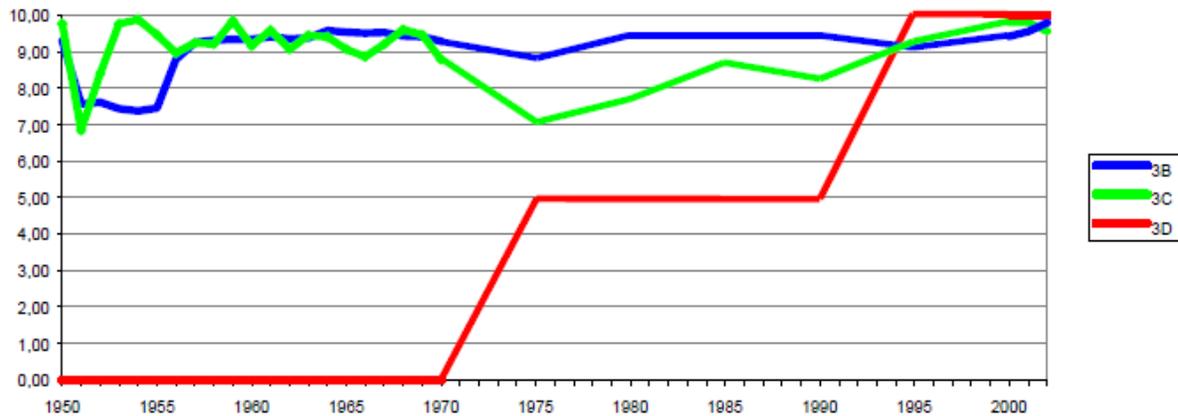
In SEFI there are three underlying components to this category, exactly as in EFI of 1970. These are shown in Table 7. Each of the components has equal weight in the Area 3 index.

The first component (3B) measures the variability of the consumer prices, where a greater variability implies a lower index and a lower amount of economic freedom. Except for some years at the beginning of the 1950's, the economic freedom has in this regard been high all through the period.

The second component (3C) measures the change in consumer prices during the last couple of years, i.e. more or less the inflation. High inflation implies a low index and low economic freedom. The index shows a considerable decline during the first half of the 1950's but the rose to quite high levels of economic freedom. In the late 1960's the index fell again and maintained at a lower level until the 1990's, when it once again reached high levels.

It is in the third component (3D) that we see a really significant change. This component measures the possibility for individuals to own foreign currencies, at home or abroad. The economic freedom was in this regard seriously limited during 1950-70 but has since then been increasing in steps. According to the index, since 1995 it receives the highest possible score.

Table 7 – SEFI components in “Area 3 Access to Sound Money”, Sweden 1950-2002



Remark 1: Area 3B - Standard inflation variability during the last five years, Area 3C - Recent inflation rate, Area 3D - Freedom to own foreign currency bank accounts domestically and abroad. Remark 2: The table is based on the 12 components included in SEFI.

Sources: 1950-70, own compilation of various sources. For 1975-2002, see Gwartney & Lawson (2004).

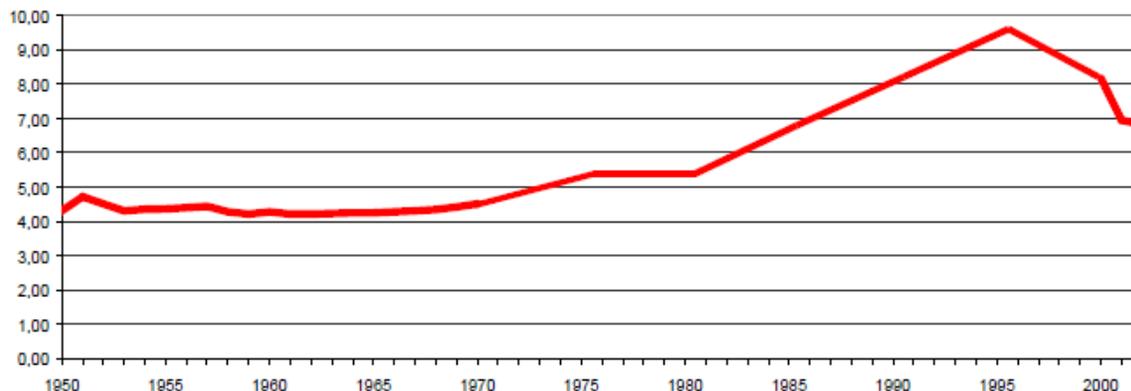
## Area 4 - Freedom to Exchange with Foreigners 1950-2002

Gwartney & Lawson (2003) describe this area in the following way:

“[F]reedom of exchange across national boundaries is a key ingredient of economic freedom. The vast majority of our current goods and services are now either produced abroad or contain resources supplied from abroad. Of course, exchange is a positive-sum activity. Both trading partners gain and the pursuit of the gain provides the motivation for the exchange. Thus, freedom to exchange with foreigners also contributes substantially to our modern living standards.”

Table 8 shows the index for 1950-2002 (the graph was also shown in Table 3). The economic freedom in this respect was relatively moderate up to about 1980. Then it increased significantly up to 1995, but has since then fallen back again. The overall level in 2002 was still higher than during the initial 1950-80 period.

Table 8 - "Area 4 Freedom to Exchange with Foreigners", Sweden 1950-2002



Remark: The table is based on the 12 components included in SEFI.

Sources: 1950-70, own compilation of various sources. For 1975-2002, see Gwartney & Lawson (2004).

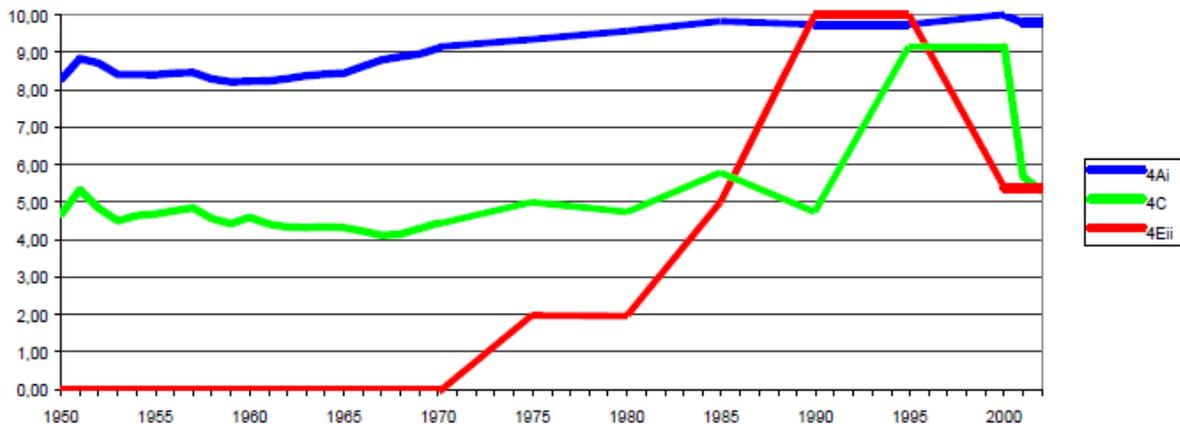
In SEFI there are three underlying components to this category, while in EFI of 1970 there are four. These three are shown in Table 9. Each of the components has equal weight in the Area 4 index.

The first component (4Ai) measures barriers to international trade by relating the government levy of tariffs in relation to the overall foreign trade. The level of economic freedom has been increasing throughout the period, from an already relatively high level in 1950.

The second component (4C) measure the foreign trade in relation to what could be expected from a country with its particular characteristics. Larger actual foreign trade than expected implies a higher index and higher economic freedom. It turns out Sweden's foreign trade was relatively moderate during 1950-90 compared to what might be expected. Then suddenly the trade was considerably higher than what might be expected, only to fall back again in 2001. The level in 2002 was not considerably higher than during the initial phase 1950-90. The economic freedom in this regard is back at moderate levels.

The third component (4Eiii) measures the economic freedom of the citizens to trade with foreigners on the international capital markets. In this aspect, the economic freedom was seriously limited for a long time. From 1970 and onwards, these restrictions were lessened and in 1990 the index finally reached the highest level of economic freedom. However, since 1995, new restrictions have been introduced so that the index is now at moderate level. Still the moderate level is higher than the levels of the 1950-70 period.

Table 9 – SEFI components in “Area 4 Freedom to Exchange with Foreigners”, Sweden 1950-2002



Remark 1: Area 4Ai - Revenue from taxes on international trade as a percentage of exports plus imports, Area 4C - Actual size of trade sector compared to expected size, Area 4Eii - Restrictions in Foreign Capital Market Exchange/Index of capital controls among 13 IMF categories Remark 2: The table is based on the 12 components included in SEFI. Sources: 1950-70, own compilation of various sources. For 1975-2002, see Gwartney & Lawson (2004).

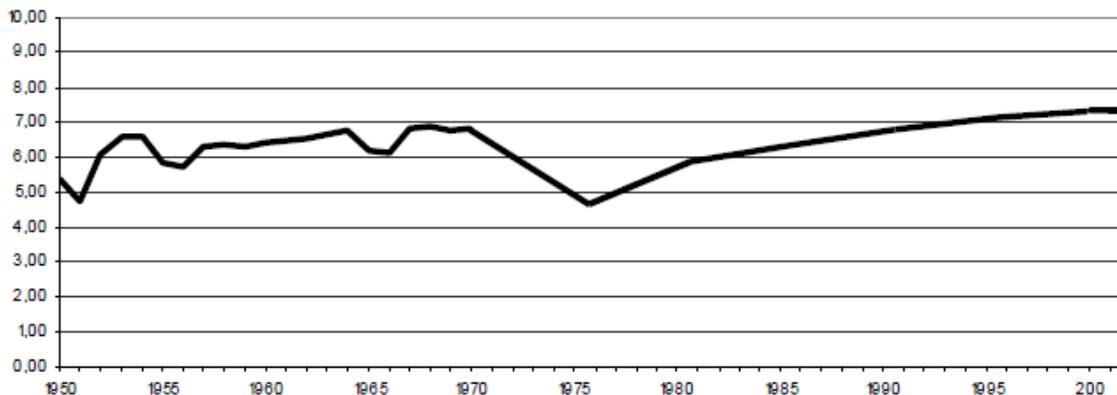
## Area 5 - Regulations 1950-2002

Gwartney & Lawson (2003) describe this area in the following way:

“When regulations restrict entry into markets and interfere with the freedom to engage in voluntary exchange, they reduce economic freedom. The final area of the index focuses on this topic. [...] Regulatory restraints that limit the freedom of exchange in credit, labor, and product markets are included in the index.”

Table 10 shows the index for 1950-2002 (the graph was also shown in Table 3). During the 1950's and 1960's, there seems to have been an upward trend, although still at a rather moderate level. During the 1970's there was a sharp drop in this aspect of economic freedom. The bottom was reached in the middle of the 1970's and since then there has been a clear upward trend. The level is higher at the end of the 1950-2002 period than at the beginning, but still not much higher than earlier moderate levels.

Table 10 – “Area 5 Regulations”, Sweden 1950-2002

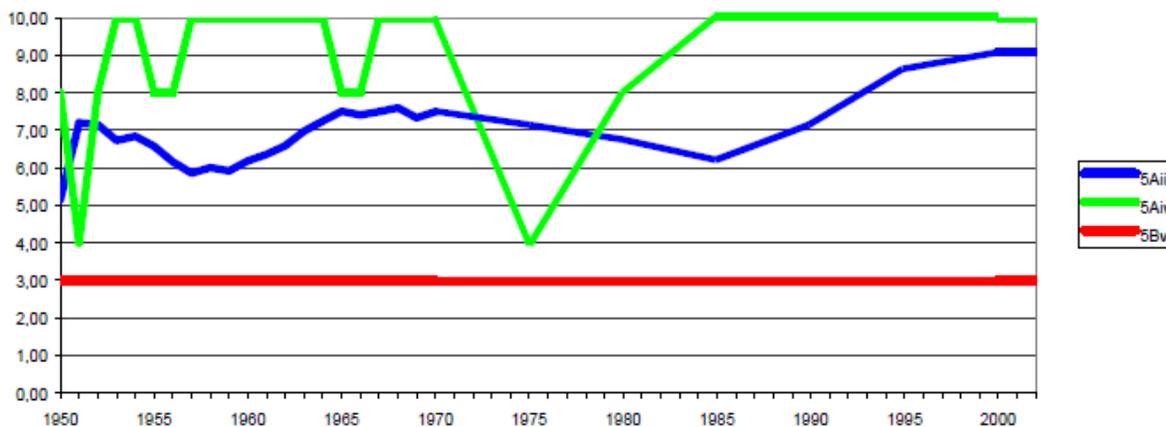


Remark: The table is based on the 12 components included in SEFI.

Sources: 1950-70, own compilation of various sources. For 1975-2002, see Gwartney & Lawson (2004).

In SEFI there are three underlying components to this category, while in EFI of 1970 there are five. These three are shown in Table 11. The components do not have equal weight in the Area 5 index. Instead, components 5Aiii and 5Aiv have equal weight and these two when weighted together then have equal weight as component 5Bv.

Table 11 – SEFI components in “Area 5 Regulations”, Sweden 1950-2002



Remark 1: Area 5Aiii - Extension of credit, Area 5Aiv - Interest rate regulations (leading to neg. rates), Area 5Bv - Use of conscripts to obtain military personnel. Remark 2: The table is based on the 12 components included in SEFI.

Sources: 1950-70, own compilation of various sources. For 1975-2002, see Gwartney & Lawson (2004).

The first component (5Aiii) measures the share of overall credit that is used by the private sector. A higher share implies higher economic freedom. The overall level of the index has been at a moderate level through most of the period. The government intervention in credit has come in

waves with bottoms in the early 1950's, the late 1950's and the middle of the 1980's. Since then, the index has reached relatively high levels.

The second component (5Aiv) measures government intervention in interest rate determination. A too low official rate could for example lead to a negative real rate and in this way create problems and limit the economic freedom. The variations in this aspect of economic freedom have been rather high. From a relatively high level in 1950, the index fell sharply, only to return to a high level after a couple of years. Then it oscillated at high level until 1970 when there was a sharp drop down to quite low levels in the middle of the 1970's. Since then there the index has been increasing again and after 1985 been stable at a high level.

The third component (5Bv) measures government intervention in the labor market via the use of conscripts to obtain military personnel. The length of the compulsory military service has varied during the period, but not enough to produce changes in the index. The level of economic freedom in this regard is rather low due to the length of the service. It should be noted that all through the period, the military service has been conducted when Sweden was in peace with other countries.

## Concluding comments

According to SEFI and EFI, the economic freedom has been relatively stable at a moderate level during 1950-80. Then it increased slightly only to fall back somewhat since 1995. However, by looking at the underlying areas and components, a richer picture emerges.

There is one area that indicates less economic freedom, namely "Area 1 Size of Government". From an already moderate level, the economic freedom fell during the 1950's through 1970's. The government share of both consumption and investment grew significantly. The marginal taxes were very high during the whole period. The overall level has stabilized at a level still considerably lower than the already moderate level of 1950.

The reasons for the slight decline in economic freedom since 1995 is to be found by a decline of the index in three components; (1) the government share of total consumption is up, (2) the expected trade is down and (3) the possibilities to trade with foreigners via the international capital markets has become more restricted.

Despite the fact that there has been a trend towards a higher degree of economic freedom in several areas and components, there is only one case where the economic freedom has been increasing considerably from an earlier low level of economic freedom, namely when it comes to the less restricted foreign capital market exchange (i.e. possibilities to own foreign currencies, at home and abroad).

It is easy to fall for the temptation to make large inferences from the time series presented in this paper. However, we must keep in mind the problems associated with this kind of quantification and that important aspects of economic freedom have been left out. For example, important aspects of labor market and business regulation have been left out, aspects in which the economic freedom might diverge from the overall picture. The complete area covering the legal system and protection of property rights has also been left out.

Nevertheless, the SEFI does add some new information about the development of economic freedom in Sweden. Where could we before read about the waves of government intervention in the credit market, or that the marginal taxes have been so high for so long? The time series could also be compared to the findings made by Krantz (2004) that Swedish GDP growth was exceptionally high 1890-50, but that it was already around 1950 that we started to loose ground to other industrialized countries, and that this development was reinforced after 1970. The SEFI also gives an historical background to the discussions about large liberalizations of the economy, a discussion that seems to be seriously mistaken since the level of economic freedom is still the same as the moderate level of 1950.

## References

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## Appendix – Swedish Economic Freedom Index 1950-70

When calculating SEFI, the sources and explanations found in Gwartney & Lawson (2003) have been followed to the largest extent possible. Therefore, I focus on any deviances. I will start by comparing the areas and components included in SEFI and EFI. Then I display the values of indices and data, and finally there is a record of the sources used. Questions could be directed to Richard C.B. Johnsson at richardcbjohnsson@tiscali.se. The raw data files could be obtained in xl-format upon request. An English summary of the preceding text is found at <http://home.tiscali.se/amagi/>.

### Part 1 – Comparison of SEFI and EFI

Table A1 shows that SEFI covers most of the aspects of economic freedom that EFI covers in 1970. The largest omission is "Area 2 Legal System & Property Rights". The other omissions are components "4D Difference between official and black mkt exchange rates", "5Biii Labor force share with wages set by centralized collective bargaining" and "5Biv Unemployment insurance".

Table A1 – Comparison of SEFI 1950-70 and EFI for 1970 ("x" = included, "-" = excluded)

	SEFI 1950-1970	EFI 1970
1 Size of Government	x	x
1A General gov't consumption as share of total consumption	x	x
1B Transfers and subsidies as a share of GDP	-	-
1C Gov't enterprises and investment as a share of gross investment	x	x
1D Top marginal tax rate	x	x
1Di Top Marginal Income Tax Rate		x
1Dii Top Marginal Income and Payroll Tax Rate		-
2 Legal System & Property Rights	-	x
2A Judiciary independence	-	-
2B Impartial courts	-	-
2C Protection of intellectual property	-	-
2D Military in Politics	-	-
2E Law and Order	-	-
3 Sound Money	x	x
3A Avg. growth of money (last 5 yrs) minus growth of real GDP (last 10 yrs)	-	-
3B Standard deviation of annual inflation (last 5 yrs)	x	x
3C Annual inflation (most recent yr)	x	x
3D Freedom of citizens to own foreign currency bank accounts (domestically and abroad)	x	x

Table A1 – (cont.)

	SEFI 1950-1970	EFI 1970
4 Freedom to Trade with foreigners	X	X
4A Tariffs	X	X
4Ai International trade tax revenues (% of trade sector)	X	X
4Aii Mean tariff rate	-	-
4Aiii Standard deviation of tariff rates	-	-
4B Regulatory Trade Barriers	-	-
4Bi Hidden import barriers	-	-
4Bii Costs of importing	-	-
4C Actual vs. expected size of trade sector	X	X
4D Difference between official and black mkt exchange rates	-	X
4E International Capital Market Controls	X	X
4Ei Access of Citizens to foreign capital markets/foreign access to domestic capital markets	-	-
4Eii Restrictions in Foreign Capital Market Exchange/Index of capital controls among 13 IMF categories	X	X
5 Regulation	X	X
5A Credit Market Regulation	X	X
5Ai Ownership of banks	-	-
5Aii Competition in domestic banking	-	-
5Aiii Extension of credit	X	X
5Aiv Interest rate regulations (leading to neg. rates)	X	X
5Av Interest rate controls	-	-
5B Labor Market Regulations	X	X
5Bi Impact of minimum wage	-	-
5Bii Hiring and firing practices	-	-
5Biii Labor force share with wages set by centralized collective bargaining	-	X
5Biv Unemployment insurance	-	X
5Bv Use of conscripts	X	X
5C Business Regulations	-	-
5Ci Price controls	-	-
5Cii Administrative Conditions/Entry of New Business	-	-
5Ciii Time with government bureaucracy	-	-
5Civ Starting a new business	-	-
5Cv Irregular payments	-	-

Table A2 provides the values for all areas and components in SEFI 1950-70 as well as EFI 1970-2002. Note that the values for the areas and the overall index differs somewhat from the graphs presented in the main text above. The reason is that the graphs are based on the 12 components included in SEFI.

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Ph.D. in Economics

Table A2 –SEFI 1950-70 and EFI 1970-2002

	1A	1B	1C	1D	1Di	1Dii	Area 1	2A	2B	2C	2D	2E	Area 2	3A	3B	3C	3D	Area 3	4A	4Ai	4Aii	4Aiii	4B	4Bi	4Bii	4C	4D	4E	4Ei	4Eii	Area 4
	Index	Index	Index	Index	Index	Index	Index	Index	Index	Index	Index	Index	Index	Index	Index	Index	Index	Index	Index	Index	Index	Index	Index	Index	Index						
1950	6,87	n/a	10,00	n/a	0,00	n/a	5,62	n/a	n/a	n/a	n/a	n/a	n/a	n/a	9,29	9,76	0,00	6,35	8,27	8,27	n/a	n/a	n/a	n/a	n/a	4,67	n/a	0,00	n/a	0,00	4,31
1951	6,37	n/a	10,00	n/a	0,00	n/a	5,46	n/a	n/a	n/a	n/a	n/a	n/a	n/a	7,57	8,84	0,00	4,80	8,83	8,83	n/a	n/a	n/a	n/a	n/a	5,34	n/a	0,00	n/a	0,00	4,72
1952	5,95	n/a	10,00	n/a	0,00	n/a	5,32	n/a	n/a	n/a	n/a	n/a	n/a	n/a	7,81	8,40	0,00	5,34	8,71	8,71	n/a	n/a	n/a	n/a	n/a	4,84	n/a	0,00	n/a	0,00	4,51
1953	5,70	n/a	10,00	n/a	1,00	n/a	5,57	n/a	n/a	n/a	n/a	n/a	n/a	n/a	7,43	9,76	0,00	5,73	8,41	8,41	n/a	n/a	n/a	n/a	n/a	4,50	n/a	0,00	n/a	0,00	4,30
1954	5,75	n/a	10,00	n/a	1,00	n/a	5,58	n/a	n/a	n/a	n/a	n/a	n/a	n/a	7,37	9,88	0,00	5,75	8,41	8,41	n/a	n/a	n/a	n/a	n/a	4,64	n/a	0,00	n/a	0,00	4,35
1955	5,64	n/a	10,00	n/a	1,00	n/a	5,55	n/a	n/a	n/a	n/a	n/a	n/a	n/a	7,45	9,46	0,00	5,64	8,40	8,40	n/a	n/a	n/a	n/a	n/a	4,68	n/a	0,00	n/a	0,00	4,36
1956	5,53	n/a	10,00	n/a	1,00	n/a	5,51	n/a	n/a	n/a	n/a	n/a	n/a	n/a	8,78	8,96	0,00	5,91	8,44	8,44	n/a	n/a	n/a	n/a	n/a	4,77	n/a	0,00	n/a	0,00	4,40
1957	5,28	n/a	8,00	n/a	1,00	n/a	4,75	n/a	n/a	n/a	n/a	n/a	n/a	n/a	9,25	9,24	0,00	6,16	8,46	8,46	n/a	n/a	n/a	n/a	n/a	4,85	n/a	0,00	n/a	0,00	4,43
1958	5,29	n/a	8,00	n/a	1,00	n/a	4,76	n/a	n/a	n/a	n/a	n/a	n/a	n/a	9,31	9,20	0,00	6,17	8,28	8,28	n/a	n/a	n/a	n/a	n/a	4,58	n/a	0,00	n/a	0,00	4,28
1959	5,21	n/a	8,00	n/a	1,00	n/a	4,74	n/a	n/a	n/a	n/a	n/a	n/a	n/a	9,34	9,84	0,00	6,39	8,20	8,20	n/a	n/a	n/a	n/a	n/a	4,42	n/a	0,00	n/a	0,00	4,21
1960	5,17	n/a	10,00	n/a	0,00	n/a	5,06	n/a	n/a	n/a	n/a	n/a	n/a	n/a	9,34	9,16	0,00	6,17	8,22	8,22	n/a	n/a	n/a	n/a	n/a	4,80	n/a	0,00	n/a	0,00	4,27
1961	5,13	n/a	10,00	n/a	0,00	n/a	5,04	n/a	n/a	n/a	n/a	n/a	n/a	n/a	9,41	9,58	0,00	6,33	8,23	8,23	n/a	n/a	n/a	n/a	n/a	4,41	n/a	0,00	n/a	0,00	4,21
1962	4,79	n/a	10,00	n/a	0,00	n/a	4,93	n/a	n/a	n/a	n/a	n/a	n/a	n/a	9,34	9,06	0,00	6,13	8,30	8,30	n/a	n/a	n/a	n/a	n/a	4,34	n/a	0,00	n/a	0,00	4,21
1963	4,59	n/a	8,00	n/a	0,00	n/a	4,20	n/a	n/a	n/a	n/a	n/a	n/a	n/a	9,37	9,44	0,00	6,27	8,37	8,37	n/a	n/a	n/a	n/a	n/a	4,32	n/a	0,00	n/a	0,00	4,23
1964	4,43	n/a	8,00	n/a	0,00	n/a	4,14	n/a	n/a	n/a	n/a	n/a	n/a	n/a	9,57	9,40	0,00	6,32	8,41	8,41	n/a	n/a	n/a	n/a	n/a	4,34	n/a	0,00	n/a	0,00	4,25
1965	4,24	n/a	8,00	n/a	0,00	n/a	4,08	n/a	n/a	n/a	n/a	n/a	n/a	n/a	9,53	9,06	0,00	6,20	8,44	8,44	n/a	n/a	n/a	n/a	n/a	4,32	n/a	0,00	n/a	0,00	4,25
1966	3,88	n/a	8,00	n/a	0,00	n/a	3,96	n/a	n/a	n/a	n/a	n/a	n/a	n/a	9,50	8,86	0,00	6,12	8,62	8,62	n/a	n/a	n/a	n/a	n/a	4,22	n/a	0,00	n/a	0,00	4,28
1967	3,65	n/a	8,00	n/a	0,00	n/a	3,88	n/a	n/a	n/a	n/a	n/a	n/a	n/a	9,52	9,20	0,00	6,24	8,79	8,79	n/a	n/a	n/a	n/a	n/a	4,11	n/a	0,00	n/a	0,00	4,30
1968	3,34	n/a	8,00	n/a	0,00	n/a	3,78	n/a	n/a	n/a	n/a	n/a	n/a	n/a	9,42	9,60	0,00	6,34	8,88	8,88	n/a	n/a	n/a	n/a	n/a	4,15	n/a	0,00	n/a	0,00	4,34
1969	3,24	n/a	8,00	n/a	0,00	n/a	3,75	n/a	n/a	n/a	n/a	n/a	n/a	n/a	9,40	9,46	0,00	6,29	8,95	8,95	n/a	n/a	n/a	n/a	n/a	4,29	n/a	0,00	n/a	0,00	4,41
1970	2,84	n/a	7,00	n/a	0,00	n/a	3,28	n/a	n/a	n/a	n/a	n/a	n/a	n/a	9,28	8,78	0,00	6,02	9,11	9,11	n/a	n/a	n/a	n/a	n/a	4,44	n/a	0,00	n/a	0,00	4,52
1970	3,23	n/a	2,00	2,00	2,00	n/a	2,41	n/a	n/a	n/a	n/a	n/a	6,47	n/a	9,42	8,97	0,00	6,13	9,17	9,17	n/a	n/a	n/a	n/a	n/a	5,37	9,00	2,00	n/a	2,00	6,38
1975	2,42	3,32	4,00	1,00	1,00	n/a	2,69	n/a	n/a	n/a	n/a	n/a	4,42	8,60	8,84	7,10	5,00	7,38	8,87	9,33	8,40	n/a	n/a	n/a	n/a	4,97	9,80	2,00	n/a	2,00	6,41
1980	1,10	3,41	4,00	0,00	0,00	n/a	2,13	n/a	n/a	n/a	n/a	n/a	6,61	8,26	9,41	7,86	5,00	7,58	9,02	9,53	8,50	n/a	n/a	n/a	n/a	4,79	9,00	2,00	n/a	2,00	6,20
1985	1,39	3,05	6,00	0,00	0,00	n/a	2,61	n/a	n/a	n/a	n/a	n/a	7,41	8,90	9,50	8,67	5,00	8,02	9,49	9,80	9,18	n/a	n/a	n/a	n/a	5,82	9,80	5,00	n/a	5,00	7,53
1990	1,49	1,99	6,00	0,00	0,00	0,00	2,37	n/a	n/a	n/a	n/a	n/a	8,35	8,88	9,44	8,23	5,00	7,84	8,96	9,73	9,08	8,08	n/a	n/a	n/a	4,79	10,00	10,00	n/a	10,00	8,44
1995	2,05	0,84	6,00	1,50	3,00	0,00	2,60	8,82	8,88	6,57	10,00	10,00	8,85	9,82	9,10	9,27	10,00	9,55	8,68	9,73	8,66	7,64	9,13	9,13	n/a	9,13	5,53	9,30	8,59	10,00	8,35
2000	1,68	3,35	6,00	1,00	2,00	0,00	3,01	8,88	8,35	8,08	10,00	10,00	9,02	9,72	9,42	9,80	10,00	9,73	9,25	9,98	9,52	8,24	9,15	8,80	9,50	9,15	5,97	7,22	9,05	5,38	8,15
2001	1,53	3,98	6,00	0,50	1,00	0,00	3,00	7,62	7,95	8,33	9,17	10,00	8,61	9,93	9,55	9,80	10,00	9,82	9,16	9,79	9,46	8,24	8,91	8,33	9,48	5,68	10,00	7,22	9,05	5,38	8,19
2002	1,02	3,98	6,00	1,50	3,00	0,00	3,13	8,33	7,83	8,33	10,00	10,00	8,90	9,23	9,79	9,56	10,00	9,64	9,02	9,79	9,22	8,04	9,23	8,83	9,63	5,28	10,00	7,69	10,00	5,38	8,24

# Richard CB Johnson

Ph.D. in Economics

Table A2 – (cont.)

	5A	5Ai	5Aii	5Aiii	5Aiv	5Av	5B	5Bi	5Bii	5Biii	5Biv	5Bv	5C	5Ci	5Cii	5Ciii	5Civ	5Cv	Area 5	Area 1-5
	Index	Index																		
1950	n/a	n/a	n/a	5,14	8,00	n/a	n/a	n/a	n/a	n/a	n/a	3,00	n/a	n/a	n/a	n/a	n/a	n/a	5,38	5,42
1951	n/a	n/a	n/a	7,19	4,00	n/a	n/a	n/a	n/a	n/a	n/a	3,00	n/a	n/a	n/a	n/a	n/a	n/a	4,73	4,93
1952	n/a	n/a	n/a	7,15	8,00	n/a	n/a	n/a	n/a	n/a	n/a	3,00	n/a	n/a	n/a	n/a	n/a	n/a	6,05	5,30
1953	n/a	n/a	n/a	6,72	10,00	n/a	n/a	n/a	n/a	n/a	n/a	3,00	n/a	n/a	n/a	n/a	n/a	n/a	6,57	5,54
1954	n/a	n/a	n/a	6,83	10,00	n/a	n/a	n/a	n/a	n/a	n/a	3,00	n/a	n/a	n/a	n/a	n/a	n/a	6,61	5,57
1955	n/a	n/a	n/a	6,57	8,00	n/a	n/a	n/a	n/a	n/a	n/a	3,00	n/a	n/a	n/a	n/a	n/a	n/a	5,86	5,35
1956	n/a	n/a	n/a	6,16	8,00	n/a	n/a	n/a	n/a	n/a	n/a	3,00	n/a	n/a	n/a	n/a	n/a	n/a	5,72	5,39
1957	n/a	n/a	n/a	5,85	10,00	n/a	n/a	n/a	n/a	n/a	n/a	3,00	n/a	n/a	n/a	n/a	n/a	n/a	6,28	5,41
1958	n/a	n/a	n/a	6,00	10,00	n/a	n/a	n/a	n/a	n/a	n/a	3,00	n/a	n/a	n/a	n/a	n/a	n/a	6,33	5,39
1959	n/a	n/a	n/a	5,92	10,00	n/a	n/a	n/a	n/a	n/a	n/a	3,00	n/a	n/a	n/a	n/a	n/a	n/a	6,31	5,41
1960	n/a	n/a	n/a	6,18	10,00	n/a	n/a	n/a	n/a	n/a	n/a	3,00	n/a	n/a	n/a	n/a	n/a	n/a	6,39	5,47
1961	n/a	n/a	n/a	6,35	10,00	n/a	n/a	n/a	n/a	n/a	n/a	3,00	n/a	n/a	n/a	n/a	n/a	n/a	6,45	5,51
1962	n/a	n/a	n/a	6,59	10,00	n/a	n/a	n/a	n/a	n/a	n/a	3,00	n/a	n/a	n/a	n/a	n/a	n/a	6,53	5,45
1963	n/a	n/a	n/a	6,98	10,00	n/a	n/a	n/a	n/a	n/a	n/a	3,00	n/a	n/a	n/a	n/a	n/a	n/a	6,66	5,34
1964	n/a	n/a	n/a	7,24	10,00	n/a	n/a	n/a	n/a	n/a	n/a	3,00	n/a	n/a	n/a	n/a	n/a	n/a	6,75	5,37
1965	n/a	n/a	n/a	7,50	8,00	n/a	n/a	n/a	n/a	n/a	n/a	3,00	n/a	n/a	n/a	n/a	n/a	n/a	6,17	5,17
1966	n/a	n/a	n/a	7,40	8,00	n/a	n/a	n/a	n/a	n/a	n/a	3,00	n/a	n/a	n/a	n/a	n/a	n/a	6,13	5,12
1967	n/a	n/a	n/a	7,49	10,00	n/a	n/a	n/a	n/a	n/a	n/a	3,00	n/a	n/a	n/a	n/a	n/a	n/a	6,83	5,31
1968	n/a	n/a	n/a	7,59	10,00	n/a	n/a	n/a	n/a	n/a	n/a	3,00	n/a	n/a	n/a	n/a	n/a	n/a	6,86	5,33
1969	n/a	n/a	n/a	7,33	10,00	n/a	n/a	n/a	n/a	n/a	n/a	3,00	n/a	n/a	n/a	n/a	n/a	n/a	6,78	5,31
1970	n/a	n/a	n/a	7,49	10,00	n/a	n/a	n/a	n/a	n/a	n/a	3,00	n/a	n/a	n/a	n/a	n/a	n/a	6,83	5,16
1970	7,89	n/a	n/a	7,39	8,00	n/a	4,64	n/a	n/a	4,49	6,42	3,00	n/a	n/a	n/a	n/a	n/a	n/a	6,16	5,51
1975	6,38	8,00	n/a	7,13	4,00	n/a	4,23	n/a	n/a	4,49	5,19	3,00	n/a	n/a	n/a	n/a	n/a	n/a	5,30	5,24
1980	7,59	8,00	n/a	6,76	8,00	n/a	4,11	n/a	n/a	4,49	4,84	3,00	n/a	n/a	n/a	n/a	n/a	n/a	5,85	5,67
1985	8,07	8,00	n/a	6,22	10,00	n/a	3,99	n/a	n/a	4,49	4,49	3,00	n/a	n/a	n/a	n/a	n/a	n/a	6,03	6,32
1990	8,39	8,00	n/a	7,18	10,00	n/a	3,95	n/a	3,93	4,49	4,40	3,00	6,00	6,00	n/a	n/a	n/a	n/a	6,12	6,62
1995	8,64	8,00	8,33	8,62	10,00	8,25	3,03	1,83	3,93	4,49	1,90	3,00	7,66	8,00	n/a	8,28	5,08	9,29	6,44	7,16
2000	8,43	8,00	6,48	9,08	10,00	8,59	3,38	4,41	2,18	3,78	3,51	3,00	8,31	9,00	7,27	8,30	7,87	9,12	6,71	7,32
2001	8,43	8,00	6,48	9,08	10,00	8,59	3,40	4,41	1,90	4,17	3,51	3,00	6,53	9,00	3,10	5,75	5,83	8,98	6,12	7,15
2002	9,13	10,00	8,00	9,08	10,00	8,59	3,33	4,41	2,50	4,33	2,42	3,00	7,06	8,00	4,67	6,75	6,83	9,05	6,51	7,28

## Part 2 – Index and data (when applicable) SEFI 1950-70 and EFI 1970-2002

Tables A3-A6 provide the values and data for the components that are included in SEFI as well as the corresponding components in EFI. This gives the time series that perhaps are the most relevant for comparative purposes. Note that this means that the area indices differ from Table A2.

Table A3 – Area 1 – Size of Government

	1A Index	data	1C Index	data	1Di Index	data	Area 1 Index
1950	6,87	16,63	10,00	10,05	0,00	72,99	5,62
1951	6,37	18,34	10,00	10,68	0,00	73,06	5,46
1952	5,95	19,77	10,00	13,11	0,00	73,76	5,32
1953	5,70	20,60	10,00	14,68	1,00	69,45	5,57
1954	5,75	20,45	10,00	13,98	1,00	69,34	5,58
1955	5,64	20,81	10,00	14,58	1,00	69,28	5,55
1956	5,53	21,19	10,00	14,34	1,00	69,33	5,51
1957	5,26	22,12	8,00	15,65	1,00	69,41	4,75
1958	5,29	22,02	8,00	15,47	1,00	69,79	4,76
1959	5,21	22,27	8,00	16,75	1,00	69,97	4,74
1960	5,17	22,43	10,00	14,74	0,00	70,12	5,06
1961	5,13	22,56	10,00	13,79	0,00	70,25	5,04
1962	4,79	23,72	10,00	14,36	0,00	70,33	4,93
1963	4,59	24,40	8,00	16,20	0,00	70,41	4,20
1964	4,43	24,95	8,00	16,53	0,00	70,78	4,14
1965	4,24	25,57	8,00	16,54	0,00	71,04	4,08
1966	3,88	26,79	8,00	16,78	0,00	71,40	3,96
1967	3,65	27,58	8,00	17,72	0,00	71,55	3,88
1968	3,34	28,65	8,00	19,63	0,00	71,77	3,78
1969	3,24	28,98	8,00	19,96	0,00	72,08	3,75
1970	2,84	30,35	7,00	20,81	0,00	72,35	3,28
1970	3,23	29,02	2,00	46,20	0,00	70,00	1,74
1975	2,42	31,77	4,00	38,10	1,00	70,00	2,47
1980	1,10	36,25	4,00	41,20	0,00	67,00	1,70
1985	1,39	35,27	6,00	28,00	0,00	80,00	2,46
1990	1,49	34,95	6,00	22,80	0,00	61-68	2,50
1995	2,05	33,02	6,00	28,30	3,00	46-53	3,68
2000	1,68	34,28	6,00	-	0,00	68,4-75,4	2,56
2001	1,53	34,80	6,00	-	0,00	64-69	2,51
2002	1,02	36,53	6,00	-	3,00	52-59	3,34

Table A4 - Area 3 Access to Sound Money

	3B		3C		3D	Area 3
	Index	data	Index	data	Index	Index
1950	9,29	1,77	9,76	1,20	0,00	6,35
1951	7,57	6,09	6,84	15,80	0,00	4,80
1952	7,61	5,98	8,40	8,00	0,00	5,34
1953	7,43	6,41	9,76	1,20	0,00	5,73
1954	7,37	6,58	9,88	0,60	0,00	5,75
1955	7,45	6,37	9,46	2,70	0,00	5,64
1956	8,78	3,06	8,96	5,20	0,00	5,91
1957	9,25	1,88	9,24	3,80	0,00	6,16
1958	9,31	1,73	9,20	4,00	0,00	6,17
1959	9,34	1,66	9,84	0,80	0,00	6,39
1960	9,34	1,66	9,16	4,20	0,00	6,17
1961	9,41	1,48	9,58	2,10	0,00	6,33
1962	9,34	1,65	9,06	4,70	0,00	6,13
1963	9,37	1,58	9,44	2,80	0,00	6,27
1964	9,57	1,06	9,40	3,00	0,00	6,32
1965	9,53	1,18	9,06	4,70	0,00	6,20
1966	9,50	1,24	8,86	5,70	0,00	6,12
1967	9,52	1,21	9,20	4,00	0,00	6,24
1968	9,42	1,44	9,60	2,00	0,00	6,34
1969	9,40	1,49	9,46	2,70	0,00	6,29
1970	9,28	1,80	8,78	6,10	0,00	6,02
1970	9,42	1,45	8,97	5,17	0,00	6,13
1975	8,84	2,90	7,10	14,51	5,00	6,98
1980	9,41	1,47	7,66	11,72	5,00	7,36
1985	9,50	1,26	8,67	6,63	5,00	7,72
1990	9,44	1,40	8,23	8,84	5,00	7,56
1995	9,10	2,24	9,27	3,67	10,00	9,46
2000	9,42	1,46	9,80	1,00	10,00	9,74
2001	9,55	1,12	9,80	2,40	10,00	9,78
2002	9,79	0,54	9,56	2,20	10,00	9,78

Table A5 - Area 4 Freedom to Exchange with Foreigners

	4Ai Index	data	4C Index	data	4Eii Index	Area 4 Index
1950	8,27	2,60	4,67	19,99	0,00	4,31
1951	8,83	1,76	5,34	30,10	0,00	4,72
1952	8,71	1,94	4,84	22,55	0,00	4,51
1953	8,41	2,39	4,50	17,47	0,00	4,30
1954	8,41	2,39	4,64	19,56	0,00	4,35
1955	8,40	2,40	4,68	20,27	0,00	4,36
1956	8,44	2,35	4,77	21,48	0,00	4,40
1957	8,46	2,32	4,85	22,68	0,00	4,43
1958	8,28	2,58	4,56	18,39	0,00	4,28
1959	8,20	2,69	4,42	16,36	0,00	4,21
1960	8,22	2,67	4,60	18,97	0,00	4,27
1961	8,23	2,66	4,41	16,21	0,00	4,21
1962	8,30	2,56	4,34	15,05	0,00	4,21
1963	8,37	2,45	4,32	14,77	0,00	4,23
1964	8,41	2,38	4,34	15,07	0,00	4,25
1965	8,44	2,35	4,32	14,83	0,00	4,25
1966	8,62	2,07	4,22	13,37	0,00	4,28
1967	8,79	1,81	4,11	11,68	0,00	4,30
1968	8,88	1,68	4,15	12,22	0,00	4,34
1969	8,95	1,58	4,29	14,40	0,00	4,41
1970	9,11	1,34	4,44	16,66	0,00	4,52
1970	9,17	1,25	5,37		2,00	5,51
1975	9,33	1,00	4,97		2,00	5,43
1980	9,53	0,70	4,79		2,00	5,44
1985	9,80	0,30	5,82		5,00	6,87
1990	9,73	0,40	4,79		10,00	8,17
1995	9,73	0,40	9,13		10,00	9,62
2000	9,98	0,03	9,15		5,38	8,17
2001	9,79	0,32	5,68		5,38	6,95
2002	9,79	0,32	5,28		5,38	6,82

Table A6 - Area 5 Regulations

	5Aiii Index	data	5Aiv Index	5Bv Index	data	Area 5 Index
1950	5,14	51,37	8,00	3,00	270	5,38
1951	7,19	71,83	4,00	3,00	270	4,73
1952	7,15	71,38	8,00	3,00	304	6,05
1953	6,72	67,14	10,00	3,00	304	6,57
1954	6,83	68,26	10,00	3,00	304	6,61
1955	6,57	65,63	8,00	3,00	304	5,86
1956	6,16	61,49	8,00	3,00	304	5,72
1957	5,85	58,47	10,00	3,00	304	6,28
1958	6,00	59,98	10,00	3,00	304	6,33
1959	5,92	59,11	10,00	3,00	304	6,31
1960	6,18	61,76	10,00	3,00	304	6,39
1961	6,35	63,48	10,00	3,00	304	6,45
1962	6,59	65,79	10,00	3,00	304	6,53
1963	6,98	69,68	10,00	3,00	304	6,66
1964	7,24	72,30	10,00	3,00	304	6,75
1965	7,50	74,93	8,00	3,00	304	6,17
1966	7,40	73,94	8,00	3,00	255	6,13
1967	7,49	74,83	10,00	3,00	255	6,83
1968	7,59	75,84	10,00	3,00	255	6,86
1969	7,33	73,19	10,00	3,00	255	6,78
1970	7,49	74,85	10,00	3,00	255	6,83
1970	7,39	-	8,00	3,00	-	6,13
1975	7,13	-	4,00	3,00	-	4,71
1980	6,76	-	8,00	3,00	-	5,92
1985	6,22	-	10,00	3,00	-	6,41
1990	7,18	-	10,00	3,00	-	6,73
1995	8,62	-	10,00	3,00	-	7,21
2000	9,08	-	10,00	3,00	-	7,36
2001	9,08	-	10,00	3,00	-	7,36
2002	9,08	-	10,00	3,00	-	7,36

## Part 3 – Sources and explanations to SEFI 1950-1970

### Area 1 Size of Government

#### A General government consumption spending as a percentage of total consumption

Sources: The index and data is based on calculations from raw data from Statistics Sweden, downloaded at [www.scb.se](http://www.scb.se) on August 12 2004.

Remark: The value for SEFI 1970=2,84 and EFI 1970=3,23. They differ slightly, probably due to the fact that Gwartney & Lawson used OECD data with its slightly different classification.

#### C Government enterprises and investment as a percentage of total investment

Sources: The index and data is based on calculations from raw data from Statistics Sweden, downloaded at [www.scb.se](http://www.scb.se) on August 12 2004.

Remark: The value for SEFI 1970=7,00 and EFI 1970=2,00. They differ considerably, something that is due to the fact that Gwartney & Lawson include SOE's (state-operated enterprises) in the

government investments, something I haven't been able to find data for. The trend still seems obvious.

## **D Top marginal tax rate (and income threshold at which it applies)**

### **i Top marginal income tax rate (and income threshold at which it applies)**

Sources: (1) Ulf Jakobsson & Göran Norrmann (1974), *Inkomstbeskattningen i den ekonomiska politiken: en kvantitativ analys av systemet för personlig inkomstbeskattning 1952-1971*, Industriens utredningsinstitut, Uppsala: Almqvist & Wiksell, p. 191-195, (2) Hans Söderberg (1996), *Inkomstskattens utveckling under 1900-talet: en vägvisare för skatteberäkningar åren 1921-1996*, Stockholm: Skattebetalarnas Förening, p. 82, (3) Statistics Sweden.

Remark: The value for SEFI 1970=0,00 and EFI 1970=0,00. They match since Bob Lawson changed the earlier value in EFI to fit my findings.

## **2 Legal System & Property Rights**

Remark: EFI provide an aggregate value for 1970. I have not managed to come up with that. The EFI sources are not available prior to 1970 and other sources have not been found.

## **Area 3 Sound Money**

### **B Standard inflation variability during the last five years**

Sources: The index and data is based on calculations from raw data from Statistics Sweden, downloaded at [www.scb.se](http://www.scb.se) on August 12 2004.

Remark: The value for SEFI 1970=9,28 and EFI 1970=9,42. They differ slightly probably due to the fact that Gwartney & Lawson used OECD data.

### **C Recent inflation rate**

Sources: The index and data is based on calculations from raw data from Statistics Sweden, downloaded at [www.scb.se](http://www.scb.se) on August 12 2004.

Remark: The value for SEFI 1970=8,78 and EFI 1970=8,97. They differ slightly probably due to the fact that Gwartney & Lawson used OECD data.

### **D Freedom to own foreign currency bank accounts domestically and abroad**

Sources: Annual Report on Exchange Restrictions, 1950-1978

Remark: The value for 1970=0,00 and EFI 1970=0,00. From my reading of the sources, there were legal restrictions on owning foreign currency bank accounts domestically and abroad during the whole 1950-70 period.

## **Area 4 Freedom to Trade with foreigners**

### **A Taxes on international trade**

#### **i Revenue from taxes on international trade as a percentage of exports plus imports**

Sources: "Tabeller belysande Tullverkets förvaltning". Import and export figures stem from Statistics Sweden, downloaded at [www.scb.se](http://www.scb.se) on August 12 2004.

Remark: The value for 1970=9,11 and EFI 1970=9,17. The statistics on tariff revenue from was particularly hard to find. For those interested in this, see the Swedish version of this paper or contact the author at [richardcbjohnsson@tiscali.se](mailto:richardcbjohnsson@tiscali.se).

#### **C Actual size of trade sector compared to expected size**

Sources: The EFI was constructed through an econometric study. A separate description of this was obtained from Bob Lawson. I have simply collected the data from the independent variables for 1950-70 and with the help of coefficient estimates calculated the values. The variables are:

" WPOP (working age population) is defined as the nation's population 15-64 years of age.

SIZE is the country's geographic size in thousands of square kilometers.

COAST is the state's extent of coastline (in kilometers).

LOCK is a dummy variable denoting whether or not the economy is "landlocked" (whether it possesses zero coastlines); LOCK is set to 1 if the economy is landlocked and 0 otherwise.

TREND is a linear trend variable.

DADS (distance adjusted demand scalar) is a measure of each economy's relative proximity to world concentrations of demand. This measure of a country's remoteness is constructed for each state, on an annual basis. The larger the DADS, the closer it is to concentrations of measured economic activity."

For more about the sources, see the Swedish version of this paper or contact the author at [richardcbjohnsson@tiscali.se](mailto:richardcbjohnsson@tiscali.se).

Remark: The value for 1970=4,44 and EFI 1970=5,37. They differs slightly, probably because the DADS variable was left out when calculating SEFI.

#### **D Difference between official exchange rate and black-market rate**

Remark: No values for this component were found. It is inherent in the nature of the problem that official records aren't published on things like black-market rates.

## **E International capital market controls**

### **ii Restrictions in Foreign Capital Market Exchange/Index of capital controls among 13 IMF categories**

Sources: Annual Report on Exchange Restrictions, 1950-1978.

Remark: The value for 1970=0,00 and EFI 1970=2,00. They differ slightly and Bob Lawson will change the EFI value in future publications of EFI. In Gwartney & Lawson's (2003) the description is vague and upon inquiry, Bob Lawson referred me to the "EFI 2001 Annual Report", where you find that:

"VII-D. Descriptive data on capital-market arrangements were used to place countries into rating categories. Countries with more restrictions on foreign capital transactions received lower ratings. When domestic investments by foreigners and foreign investments by citizens were unrestricted, countries were given a rating of 10. When these investments were restricted only in a few industries (e.g., banking, defence, and telecommunications), countries were assigned a rating of 8. When these investments were permitted but regulatory restrictions slowed the mobility of capital, countries were rated at 5. When either domestic investments by foreigners or foreign investments by citizens required approval from government authorities, countries received a rating of 2. A zero rating was assigned when both domestic investments by foreigners and foreign investments by citizens required government approval.

Sources: International Monetary Fund, Annual Report on Exchange Arrangements and Exchange Restrictions (various issues) and Price Waterhouse, Doing Business in ... publication series."

## **Area 5 Regulation**

### **A Credit Market Regulation**

#### **iii Extension of credit**

Sources: International financial statistics (IMF, 1948-).

Remark: The value for SEFI 1970=7,49 and EFI 1970=7,39. Data for the years 1950-55 is from December 1956, and so on. There is a break in the series between Q3 and Q4 1968 where all of a sudden the private credits drop from 69.08 billion SEK to 35.67. This is due to some kind of re-classification that I find no record of. To deal with this, I've made a re-calculation of the shares. Data is also available for 1937-42+45-49 in the publication.

#### **iv Interest rate regulations (leading to neg. rates)**

Sources: International financial statistics (IMF, 1948-), John Hassler, <http://hassler-j.iies.su.se/SWEDATA/>, Downloaded on August 12 2004.

Remark: The value for SEFI 1970=10,00 and EFI 1970=8,00. They differ somewhat, a fact that could be due to some kind of interest rate regulation. I've tried to follow EFI but was not quite able to do that in this case. I've computed the index by taking the central bank interest rate (Hassler's variable R) and deducted the annual consumer price inflation. This real interest rate, if positive it was given a 10, if negative but over -5 an 8, between -5 and -10 a 6. If the real rate was under -10 a 4, if this was a persistent thing a value of 2 and if the government totally had taken over or destroyed the credit market a 0.

## **B Labor market regulations**

### **iii Share of labor force whose wages are set by centralized collective bargaining**

Remark: EFI provides a value for 1970, something I haven't been able to do. I have talked to well-known academic people like Prof. Emeritus Nils Elvander and Christian Nilsson at the Department of Economics at Uppsala U, several persons at IFAU at Uppsala U and places like ILO and CESifo (Dr. Sherman), without any success. The only data I've found is from "Collective Bargaining Coverage in the OECD from the 1960s to the 1990s", by Wolfgang Ochel, CESifo Forum (Winter 2001). This report states a share >70% for 1970, 1965 and 1960, but this is not enough to create an index. It turned out that these estimates actually were provided by Nils Elvander and Christian Nilsson! Jim Gwartney referred me to some of his own studies in this field but none of them contained relevant information. Anyhow, we can conclude that the centralized collective bargaining have been extensive, as is also evidenced by Svante Nycander's book "Makten över arbetsmarknaden".

### **iv Unemployment benefits—the unemployment benefits system preserves the incentive to work**

Remark: EFI provides a value for 1970, something I haven't been able to do. In one of Jim Gwartney's studies, "Regulation, Unions, and Labor Markets IN OECD Countries", I've found data for 1970, 1965 and 1961, but once again, this is hardly enough to create a time series. None of the persons referred to in relation to component 5Biii had any hints. Anyhow, it could be interesting to note that the level was as low as 6% as late as 1970. By 1975 it was 20% and in 1995 27%. Thus, it seems things changed dramatically in the early 1970's.

### **v Use of conscripts to obtain military personnel**

Sources: Tänneryd, Jan (2002), "Inskrivningsväsendet under 100 år", p. 43-45, in Dahlström & Söderberg, Plikt, Politik och Praktik (2002).

Remark: The value for 1970=3,00 and EFI 1970=3,00. The values for SEFI could possibly be lower if the officially declared amount of rehearsals were included. However, I'm not sure to what extent they were actually exercised.

## Endnotes

1 See Gwartney & Lawson (2004) for the 2002 index. Berggren (2003) provides a survey of the research on the relation between economic freedom and economic growth.

2 For more on this, see Appendix, Part 3.

3 However, this component is connected to some measurement problems that are expressed in the Appendix, Part 3.

4 For an analysis of the effect of marginal taxes on labor productivity, unemployment and the division of labor, see Johnsson (2004).