

Swedosclerosis or Pseudosclerosis?

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In 1970, Martin Schnitzer anointed Sweden as the world's closest approximation to utopia.¹ The record reveals that Schnitzer spoke more than baseless praise. Beginning in the late 19th century, the Swedish economy embarked upon a period of robust growth. From 1870 to 1970, the Swedish Gross Domestic Product (GDP) expanded at nearly twice the rate of the United States and Great Britain. In the 1930's, Sweden defied the international economic crisis, virtually escaping the hardships of the Great Depression. By 1970, Sweden had the fourth highest per capita GDP in the world.²

Economic growth formed one aspect of Sweden's success. Sweden complimented prosperity with a generous welfare state and favorable labor policies. Quality of life indicators measuring education and health care consistently placed Sweden in the highest echelons.³ An equitable income distribution virtually eliminated poverty. A comprehensive "workfare" program held unemployment under three percent.

The successes of the Swedish system earned international acclaim, but beginning in the mid-1980's, the Swedish miracle lost some of its luster. Swedish economists described a phenomenon known as "swedosclerosis." These economists argued that the generous welfare state policies, specifically those adopted in the 1960's and 1970's, destabilized the Swedish economy and hampered expansion.⁴ Generous sick leave increased absenteeism.⁵ According to swedosclerosis theorists, wage parity discouraged workers from developing technological skills and pursuing education. Critics argued that Sweden's high tax rates throughout the post-war period further exacerbated this tendency, and a growing mound of statistical evidence appeared to support such conclusions. Then the worldwide recession of the early 1990's impacted Sweden

with particular severity. The nation's historically low unemployment spiked from less than two percent to over thirteen percent, prompting Assar Lindbeck, a member of the Nobel Prize Committee, to declare in 1996 that the so-called "Swedish Experiment" was unraveling.⁶ Swedish politicians listened, changing the tax code, making anti-inflation the primary policy priority, and lowering welfare state benefits.

Our findings suggest that Sweden's policymakers may be acting too hastily. At the very least, significant evidence casts complications into the swedosclerosis hypothesis. We divide our discussion of the Swedish economy into two historical periods. First we assert that from 1970 to 1990, the swedosclerosis perspective relies upon selective interpretation of statistics, or what some might call "fuzzy math." Looking at the statistics from a slightly different perspective indicates that Sweden's economy actually performed at a competitive level during the 1970-1990 period. Then, in our paper's second section, we analyze Swedish performance during the 1990's. During this period Sweden's economy experienced a more severe recession than other parts of the world. However, our analysis suggests that Sweden's welfare state policies were not responsible. Furthermore, recent economic data demonstrates that Sweden's relative economic performance has improved in recent years suggesting that the problems of the early 1990's reflected situational conditions rather than a long-term trend. Our final section demonstrates that, perhaps with a few exceptions, no causal relationship may be established between Sweden's economic troubles and its welfare state policies.

I. Swedish Economic Performance 1970-1990

The first section of our paper rebuts arguments that the Swedish economy experienced a performance lag relative to other nations during the period 1970-1990. First, we will show that

these arguments fail to account for the catch-up convergence hypothesis. Second, we will demonstrate that declines not attributable to the catch-up convergence hypothesis represent the characteristics of Purchasing Power Parity (PPP) measurements. Third, we will note that swedosclerosis economists have skewed the data by selectively choosing the years for making the per capita GDP comparisons.

Swedosclerosis economists note that between 1970 and 1990, Sweden's per capita GDP grew slower than the GDP of other nations.⁷ It is true that Sweden's comparative advantage over other Organization for Economic Cooperation and Development (OECD) nations decreased after the mid-1970's. For the entire period between 1970 and 1990, the GDP grew at 2.0 percent compared to 3.0 percent in the OECD. Over the same period, Swedish per capita GDP grew by \$3,622 versus \$4,148 in the OECD.⁸

However, OECD figures include nations such as Japan, Turkey, Mexico, and Greece who began 1970 with significantly lower GDPs than Sweden. The catch-up convergence hypothesis establishes that relatively poorer nations will experience more rapid growth than wealthier nations.⁹ Catch-up convergence theorists contend that economically advanced countries have already utilized their most readily available resources, rendering future development more difficult. In contrast, poorer nations have a pool of unused, unexploited, and relatively accessible resources. Increasing the magnitude of this effect, small absolute gains significantly improve the percentage growth in the GDP of poorer nations while having a minimal impact on the percentage growth of GDP in wealthier countries. Empirical evidence supports the catch-up convergence hypothesis. Analysis by Steven Dowrick shows a .6 correlation between faster growth and relatively low GDP.¹⁰

Thus, since Sweden began the 1970-1990 period as one of the world's wealthiest countries, one would expect the Swedish economy to expand at a slower pace than the economies of poorer OECD nations. The data in Appendix A supports this conclusion. During the 1970 to 1990 period, Sweden's per capita GDP fell from 115 percent of the OECD average to 106 percent (a decline of 9 percent relative to the OECD average). Other relatively wealthy nations, like Switzerland and the United States, fared similarly. During this period, the United States' position declined by 10 percent and Switzerland's position fell by 27 percent relative to the OECD average.

However, some economists note that catch-up convergence does not explain why other countries actually overtook Sweden in per capita GDP, asserting that once countries "caught-up," they would no longer benefit from convergence. The simplest expression of this aspect of the swedosclerosis perspective is a ranking of per capita GDPs in OECD member states (Appendix A). In 1970, Sweden's per capita GDP ranked fourth in the world; by 1990, Sweden ranked ninth. At first glance, such statistics appear to be evidence of a modest decline. However, further discussion of the PPP measurement and the per capita rankings renders such a change entirely inconsequential.

Swedosclerosis economists fail to note that PPP measurements are highly variable. Referring to Appendix A, note that between 1990 to 1995, Denmark progressed from eleventh to fifth in international rankings, its percentage advantage over the average OECD income increasing by 9 percent. Other nations, such as Finland, Austria, and Ireland showed similar shifts. Certainly, in five years, it is unlikely that the fundamentals of the world market underwent such a traumatic adjustment. Rather the variability indicates characteristics intrinsic to the PPP rankings themselves.

Variability in the per capita income comparisons occurs for three reasons. First, PPP data poses measurement problems. For example, when the OECD revised its figures for 1989, the average change for the 24 OECD countries was 5.2 percent versus the OECD average. One country experienced a 13 percent shift relative to the OECD average. Sweden's so-called decline is well within such a margin of error.¹¹ Similarly, Steven Dowrick has demonstrated that there is typically an aggregation error of up to 10 percent when determining PPP price bundles.¹²

Second, even assuming accuracy, the rankings fluctuate dramatically because many of the OECD nations have clustered at similar levels of national income. A glance at the Appendix A reveals that in 1995 fourteen nations were within 11 percent of Sweden's per capita GDP. Hence, the 10 percent aggregation error Dowrick calculated could completely change the character of the per capita GDP rankings. Since the nations are at relative parity, cyclical deviations rather than long term shifts substantially change the order.

In addition to the difficulties posed by the general nature of PPP measurements, per capita GDP comparisons may also be skewed by the timeframe chosen for comparison. To make this point clearer, consider an analogy from college football. Suppose one were to assess the quality of the University of Oklahoma football program based only upon an AP Poll from December of 1987 and one from October of 2000. In those polls, Oklahoma was ranked first. From that data alone, one might conclude that Oklahoma had the best football team for the entire period between 1987 and 2000. However, such a conclusion would be fallacious—neglecting to note that Oklahoma had losing seasons in 1996, 1997, and 1998.

Similarly in economics, the more effective method for truly assessing per capita GDP “rankings” is to study time series data rather than numbers from any particular two years. A study of time series data reveals that Sweden maintained its relative position between 1970 and

1990. In 1970, Sweden's business cycle completed a boom that was disjointed from the fluctuations in the world economy.¹³ Therefore, in 1970, Sweden's per capita GDP was exaggerated when compared with the per capita GDP of other nations. This distortion proved to be brief. By 1972, Sweden's per capita GDP had fallen to seventh place.¹⁴ Sweden avoided the early stages of the oil crisis, which briefly caused its per capita GDP to return to fourth in the mid-1970s. However, by 1977, the Swedish per capita GDP had fallen back to ninth in the world. Sweden's per capita GDP fluctuated rather insignificantly between ninth and seventh place from 1977 to 1990. Only in 1991 with the onset of a severe recession in Sweden did Sweden drop to fourteenth place internationally.¹⁵ This sudden drop leads us to the second section of our paper.

II. Swedish Economic Performance in the 1990's

In the early 1990's, Sweden suffered a particularly severe recession. Between 1991 and 1993, the GDP fell by 5 percent and manufacturing declined by 15 percent.¹⁶ Unemployment, which had historically been in the low single digits, rose to above 10 percent.¹⁷ Total unemployment, which includes those participating in government labor market programs, reached as high as 13.2 percent.¹⁸ Although a recession occurred worldwide, it appeared to have a disproportionately negative impact upon Swedish economic performance. By 1993, Sweden's per capita GDP had fallen to seventeenth in the OECD, 5 percent below the OECD average (see Appendix A).

In the late 1990's Sweden experienced a recovery. Real GDP grew by 3.0 percent in 1998 and 3.8 percent in 1999.¹⁹ By 1999, total unemployment fell to 5.6 percent, within the range of Sweden's unemployment fluctuations for the 1970's and 1980's. When those involved

in government labor market programs are subtracted from Sweden's total unemployment, only 2.5 percent of the population are actually unemployed.²⁰

However, despite the robust recovery of the late 1990's, Sweden's per capita GDP was still fifteenth in the world according to 2000 OECD figures (Appendix A). The concerns raised in section one about the applicability of such measurements remain relevant. Nonetheless, it is true that Sweden experienced economic difficulties in the early 1990's that continue to have lingering effects. In the next section, we examine arguments asserting that the downturn of the early 1990's resulted from Sweden's welfare state policies.

III. The Welfare State and Economic Performance

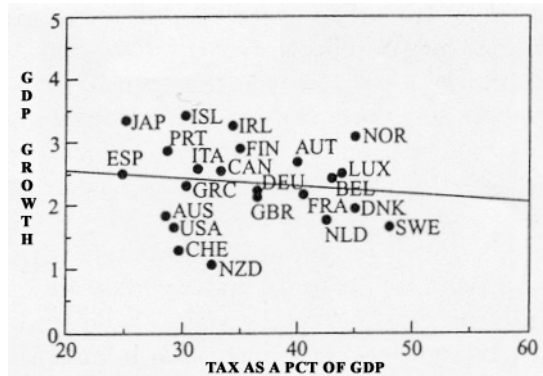
In 1993, the Lindbeck Commission contended that Sweden's economic malaise resulted from "deficiencies in the general economic, social, and political milieu."²¹ As we have already demonstrated, the swedosclerosis economists grossly exaggerated the poor performance of the Swedish economy. However, it still is possible that the Swedish welfare state negatively impacted Sweden's economic performance. Our study demonstrates that economists' efforts to link welfare state policies to slow growth lack credibility. In some cases, the evidence for suggesting such a link is so dubious that it can hardly be claimed. This is particularly true when considering attempts to demonstrate a broad, general correlation between welfare state policies and economic decline. In other instances, swedosclerosis economists attempt to be more specific, claiming that high taxes discourage workers from working and pursuing higher levels of education. This results in lower productivity. We will demonstrate that Swedish policy has not been as dysfunctional in these areas as the critics suggest. Sometimes, the swedosclerosis

economists expose legitimate, specific policy failures; however, these policy failures cannot be applied to justify a larger rejection of the Swedish model.

First, let us consider the swedosclerosis argument in its most general form, essentially that welfare state policies slow economic growth. Although imperfect, one relatively accurate way to consider the degree to which a nation has adopted welfare state policies is to consider taxation as a percentage of GDP. Therefore, according to the swedosclerosis hypothesis, nations with high taxation should have slower growth rates over a period of time.

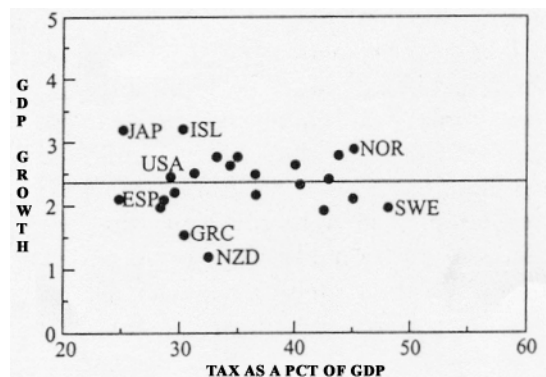
Let us briefly assess this theory with regard to the per capita GDP comparisons contained within Appendix A. Sweden and Denmark have similar tax rates.²² However, Denmark remains one of the world's wealthiest nations. In 1970, according to Appendix A, the Danes ranked sixth with an income 6 percent above the OECD average. By 1995, they ranked fifth. Conversely, the United States governmental expenditures occupy a very small percentage of Gross National Product (GNP). However, American productivity and per capita GNP growth was even slower than Sweden's throughout the 1970-1990 period. Therefore, a simplistic link between governmental spending and economic atrophy seems to be inconclusive.²³

Of course, such a conclusion may be disregarded as too facile. However, more detailed analysis does not change the result; statistical studies support this general observation. Data collected between 1970 and 1990 for OECD countries failed to reveal a strong correlation between tax levels and overall growth. The regression line appearing in graph 2.1 reveals only a slightly negative relationship between a high share of the GDP going to taxes and GDP growth. According to the regression line, tax levels at 20 percent appeared to suggest an annual growth rate of about 2.5 percent whereas tax rates of 60 percent would have predicted growth rates of about 2.25 percent.



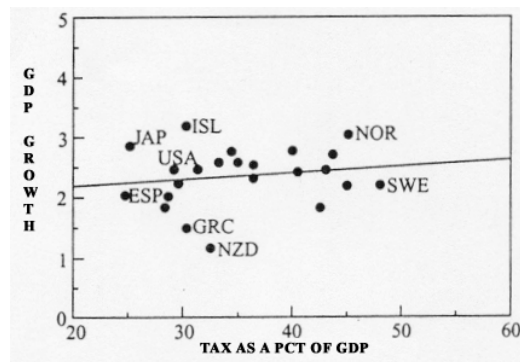
Graph 2.1 GDP Growth and Taxes²⁴

This rather weak negative relationship between taxes and GDP growth evaporates, even reverses itself, when one includes other considerations. Nations with higher tax ratios also tended to have higher GDPs at the beginning of the measurement period. According to the convergence theory and most available empirical studies, relatively poorer nations will generally experience more rapid growth than a relatively wealthy nation. When Agell attempted to statistically account for this difference between high tax and low tax nations, he obtained a graph with a horizontal regression line.



Graph 2.2: GDP Growth related to Taxes
Includes convergence adjustment²⁵

Also, high tax nations tended to have a fairly elderly population during the period. This impacts the size of the labor force and the percentage of people that the labor force must support. Most economists believe that an older population tends to slow economic growth. When Agell attempted to account for this, his graph actually showed a slightly positive correlation between high taxes and GDP growth.



Graph 2.3: GDP Growth related to Taxes
Includes convergence and population age adjustments²⁶

Aside from broad studies attempting to associate the welfare state in general with slow growth, swedosclerosis economists argue that Sweden has experienced relatively slow productivity growth since 1970.²⁷ Low productivity growth would lead to low GDP growth. However, this contention also encounters problems.

First, in statistical reporting, Sweden continues to follow UN recommendations following World War II that sets productivity growth rates by government workers at zero. However, other countries include a positive growth rate for their governmental workers. Since a relatively large percentage of Swedish workers are employed by the public sector, this skews data.²⁸

To counter this argument, swedosclerosis economists cite a study that indicated that worker productivity in the public sector actually declined.²⁹ Therefore, Sweden's zero growth

statistical assumption actually exaggerated real Swedish worker performance. However, few nations adopted a full employment policy strategy with more enthusiasm than Sweden in the 1970's and 1980's. When the private sector could no longer meet the full employment criterion, the public sector would create employment arrangements.³⁰ In times of recession, this meant that some workers were hired or retained even when there was little work to do. Full employment served an important part in the Swedish welfare system—not always as a method for increasing the value of worker inputs. If one is to evaluate Swedish productivity in this manner, then every unemployed person receiving welfare benefits in the United States must be counted as a “worker” in the public sector. In fact, when one considers Swedish productivity growth in the business sector, Sweden slightly outperformed OECD nations between 1973 and 1989 (1.4 percent to 1.5 percent)³¹.

Even if one accepts the argument that Sweden's productivity growth been sluggish, such declines may not be the result of welfare state policies. Swedosclerosis economists have the burden of establishing a link between welfare state policies and the sluggishness. Some have argued that high taxes create disincentives for workers. For each earned dollar, an ever-increasing share goes to the government, and, since the laborer receives less compensation for his labor, it is argued that his motivation decreases. Eventually, people will either leave the work force or scale back participation.

However, this argument does not correlate with the facts. Sweden has one of the highest rates of work force participation in the world. Women, a section of the work force where the supply tends to be the most elastic, are more likely to be employed in Sweden than any other European country.³² Sweden's welfare programs, such as generous sick leave and public childcare services, facilitate entry into the labor market. Swedosclerosis economists forget that

the barriers and incentives for employment are more than mere take-home salary. Although Sweden's high income taxes may serve as a disincentive, they are counterbalanced by welfare state policies such as subsidized child care that aid working people, making it easier for women to participate in the labor market.

Next, Swedish economists turn to education. Although enrollment in post-secondary vocational training has increased, Lindbeck notes that Swedish enrollment in four-year universities has declined in recent years.³³ A higher percentage of Swedes earned college diplomas in the 1950's than in the 1980's. As a result of the reduction in future earnings rewards, Lindbeck contends that the wage solidarity policies decreased worker incentive to pursue higher education. Lindbeck contends that lower educational levels lead to lower productivity.

This argument appeals to accepted beliefs. Unquestionably, a certain level of education helps workers improve their skills. Workers who can read, write, and who possess high-level skills increase productivity tremendously. However, college degrees do not always translate into areas that will be productive in the labor market. A highly skilled welder with a vocational background will probably have a more favorable impact upon productivity than a college-educated musician. In fact vocational training, a strong aspect of the Swedish system, is often considered the best way to directly prepare someone for the needs of the labor force. Furthermore, Sweden's students consistently score at an average level on internationally administered tests. Lindbeck focuses on the number of years in school, not the quality and efficiency of the educational system itself. It's possible that 11 years of schooling in Sweden may have the same impact as 13 years of education in the United States. Simply, there is no

reason to believe that Sweden has a poorly educated work force, at least that would be reflected in meeting the needs of businesses.

Of course, Swedish economists at times exposed legitimate flaws in the Swedish system. However, such flaws required policy modifications rather than large-scale reforms. Such is the case with Sweden's high-rate of absenteeism. Beginning in the 1960's, Sweden enacted a policy of sickness insurance. By the 1980's, this policy provided 90 percent compensation from the first day of reported sickness. Between 1963 and 1988, the average number of sickness days increased from 13 days to 25 days. For the first week of absence, an employee did not even have to present proof of illness. Reforms in the early 1990's requiring doctor's notices, lowering compensatory amounts, and excluding the first day of absence from the benefit structure significantly lowered absenteeism.³⁴

Although Lindbeck failed to provide evidentiary findings that demonstrated the impact of absenteeism on worker productivity, we accept that such behavior was harmful. We do agree with changes in Sweden's sickness insurance programs. However, such changes were adaptations rather than abandonment of the welfare state.

IV. What Really Went Wrong in the 1990's

There is little evidence linking welfare state policies to the recession of the early 1990's. Indeed, several factors provide better explanations for Sweden's economic malaise during that period.

First, in 1990, Sweden changed its economic goals from full employment to low inflation. In order to achieve this objective, the Swedish Central Bank raised interest rates.³⁵ These interest rates shocked certain sectors of the economy, such as activity in the real estate

sector. As a result, the Swedish government had to bail out three major national banks. This bailout cost the equivalent of 4 percent of Sweden's annual GNP.³⁶ Additionally, creating a real recipe for disaster, the anti-inflation policy coincided with the beginning of a downturn in Sweden's business cycle and a recession worldwide. Such a tight monetary policy combined with the associated financial disruption unquestionable contributed to the economic difficulties Sweden faced in the early 1990's.

Second, Sweden adopted a tax program in the late 1980's that increased household savings by 13 percent, lowering domestic demand.³⁷ A reduction in consumer spending would also slow economic growth.

Third, the forestry, shipbuilding, and mining industries all experienced turbulence in the early 1990's.³⁸ These are staple areas of the Swedish economy. Reflecting this phenomenon, the price of Swedish imports increased at a greater rate than the price for Swedish exports, 31.5 percent compared to 23.6 percent. Thus, in addition to enduring contractionary monetary policy, the Swedish economy had to deal with disruptions in some of its most important sectors.

Fourth, birth rates declined in Sweden earlier than other OECD nations. Therefore, by the 1990s, the percentage of elderly Swedes was relatively higher than in previous years. This phenomenon burdened the social security system and, hence, slowed Swedish economic growth.³⁹ Lindbeck himself acknowledges this point.

Finally, Lindbeck also ignores the fact that Sweden avoided involvement in both World War I and World War II. In fact, Sweden has not declared war since 1813, when it did so against Napoleon. This neutrality protected the Swedish economy from the turmoil elsewhere. This may explain much of Sweden's favorable economic performance between 1900 and 1950. Consequently, an unnatural gap emerged between Sweden and other OECD-Europe nations. The

gap did not adequately reflect resources, labor skills, or economic policy. During the subsequent 50 years, Swedish neutrality did not confer similar advantages. Therefore, it is only logical that France, Germany and other nations experienced relatively rapid growth as they narrowed the differential caused by the wars. In some cases, it is possible that the wars were even responsible for creating Sweden's "lead" over such nations. When the wars no longer skewed economic conditions, these other nations used their larger labor force and economic resources to eclipse Swedish economic performance, thus accounting for some of Sweden's relative decline.

V. Conclusion

The evidence establishes that the swedosclerosis hypothesis lacks credibility. The first section demonstrated that between 1970 and 1990, the Swedish economy performed at its expected level. Catch-up convergence dictated that Sweden would grow at a slower rate than poorer countries. Sweden's fall from third to ninth in per capita income among OECD countries may be easily accounted for by the volatile and imprecise nature of such rankings.

The second section acknowledged that Sweden experienced a particularly severe recession in the early 1990's. However, the third section demonstrated that the swedosclerosis economists fail to show a causal connection between welfare state policies and economic decline. International studies fail to provide a correlation between high tax rates and sluggish growth. Criticisms specific to the Swedish system, largely that it hampers productivity, cannot be verified by the facts. In fact, the fourth section illustrates that any discernable decline in the Swedish economy may be attributed to factors well outside the domain of the welfare state. Thus we conclude that swedosclerosis is actually psuedosclerosis.

The Swedish welfare state has guaranteed generations with one of the best living standards in the world. The introduction chronicled many of its victories: workforce participation, excellent health care, and the elimination of poverty among others. Swedosclerosis, more appropriately termed psuedosclerosis, provides no justification for dismantling a system that has brought so much good to so many.

References

- Agell, Jonas. "Why Sweden's Welfare State Needed Reform." *The Economic Journal*, Vol. 106, November 1996, pages 1761-1771. Oxford, UK: Royal Economic Society, 1996.
- Dowrick, Steve. "Swedish Economic Performance and Swedish Economic Debate: A View from Outside." *The Economic Journal*, Vol. 106, November 1996, pages 1773-1779. Oxford, UK: Royal Economic Society, 1996.
- The Europa World Year Book 1992*, pages 2580-2583. London: Europa Publications limited, 1992.
- The Europa World Year Book 2000*, pages 3440-3448. London: Europa Publications limited, 2000.
- Gardner, Stephen, H. Comparative Economic Systems: Second Edition. Fort Worth: Dryden Press, 1998.
- Henrekson, Magnus. "Sweden's Relative Economic Performance: Lagging Behind or Staying on Top?" *The Economic Journal*, Vol. 106, November 1996, pages 1747-1761. Oxford, UK: Royal Economic Society, 1996.
- International Monetary Fund. "IMF Concludes Article IV Consultation with Sweden." September 8, 2000. <http://www.imf.org/external/np/sec/pn/2000/pn0074/htm>.
- Korpi, Walter. "Eurosclerosis and the Sclerosis of Obejctivity: On the Role of Values Among Economic Policy Experts." *The Economic Journal*, Vol. 106, November 1996, pages 1727-1746. Oxford, UK: Royal Economic Society, 1996.
- Korpi, Walter. "Welfare States, Economic Growth, and Scholarly Objectivity." *Challenge*. Vol. 43 no. 2, March-April 2000, pages 49-66. M.E. Sharpe, Inc. 2000.
- Lindbeck, Asaar. *The Swedish Experiment*. Sweden: SNS Center for Business and Policy Studies, 1997.

Lindbeck, Asaar. "Swedish Experiment." *Journal of Economic Literature*, Vol. XXXV (September 1997), 1273-1317. American Economic Association. Evanston, Illinois. 1997.

OECD. *Main Economic Indicators*. Paris: OECD, Various Years.

Endnotes

- ¹ Gardner, Stephen, H. Comparative Economic Systems: Second Edition. Fort Worth: Dryden Press, 1998. Page 380
- ² Lindbeck, Assar. *The Swedish Experiment*. Sweden: SNS Center for Business and Policy Studies, 1997. Page 33
- ³ Gardner, 380
- ⁴ Lindbeck, 10 (1997a)
- ⁵ Gardner, 394
- ⁶ Lindbeck, 88 (1997a)
- ⁷ Lindbeck, 32 (1997a)
- ⁸ Korpi, 1732 (1997)
- ⁹ Korpi, Walter. "Welfare States, Economic Growth, and Scholarly Objectivity." *Challenge*, Vol. 43 no. 2, March-April 2000, pages 49-66. M.E. Sharpe, Inc. 2000. Page 55.
- ¹⁰ Dowrick, Steve. "Swedish Economic Performance and Swedish Economic Debate: A View from Outside." *The Economic Journal*, Vol. 106, November 1996. Oxford, UK: Royal Economic Society, 1996. Page 1777.
- ¹¹ Korpi, 1737 (1996)
- ¹² Dowrick, 1776
- ¹³ Korpi, 1733 (1996)
- ¹⁴ Korpi, 1733 (1996)
- ¹⁵ Korpi, 1734 (1996)
- ¹⁶ Lindbeck, 65 (1997a)
- ¹⁷ OECD. *Main Economic Indicators*. Paris: OECD. 1995.
- ¹⁸ Lindbeck, 92 (1997a)
- ¹⁹ International Monetary Fund. "IMF Concludes Article IV Consultation with Sweden." September 8, 2000. <http://www.imf.org/external/np/sec/pn/2000/pn0074/htm>.
- ²⁰ International Monetary Fund. "IMF Concludes Article IV Consultation with Sweden." September 8, 2000. <http://www.imf.org/external/np/sec/pn/2000/pn0074/htm>.
- ²¹ Korpi, 1732 (1996)
- ²² Agell, Jonas. "Why Sweden's Welfare State Needed Reform." *The Economic Journal*, Vol. 106, November 1996. Oxford, UK: Royal Economic Society, 1996. Page 1763.
- ²³ Korpi, 1738 (1996)
- ²⁴ Agell, 1763
- ²⁵ Agell, 1763
- ²⁶ Agell, 1763
- ²⁷ Lindbeck, 37 (1997a)
- ²⁸ Korpi, 1739 (1996)
- ²⁹ Korpi, 1740 (1996)
- ³⁰ Korpi, 1740 (1996)
- ³¹ Korpi 1738 (1996)
- ³² OECD 1999
- ³³ Lindbeck, 41 (1997)
- ³⁴ Agell, 1767
- ³⁵ Korpi, 1741
- ³⁶ Lindbeck, Assar. "Swedish Experiment." *Journal of Economic Literature*, Vol. XXXV (September 1997). American Economic Association. Evanston, Illinois. 1997. Page 1305.
- ³⁷ Korpi, 1741 (1996)
- ³⁸ *The Europa World Year Book 1992*, pages 2580-2583. London: Europa Publications limited, 1992.

APPENDIX A

1970		1990		1995		1999		
Rank	Index	Rank	Index	Rank	Index	Rank	Index	
1	Switzerland	154	1	Luxemberg	143	1	Luxemburg	180
2	United States	148	2	United States	137	2	United States	151
3	Luxemberg	131	3	Switzerland	133	3	Norway	125
4	Sweden	115	4	Canada	114	4	Switzerland	125
5	Canada	108	5	Japan	110	5	Iceland	121
6	Denmark	106	6	Norway	109	6	Canada	119
7	France	106	7	France	108	7	Denmark	117
8	Australia	104	8	Iceland	108	8	Netherlands	113
9	Netherlands	104	9	Sweden	106	9	Ireland	112
10	New Zealand	101	10	Austria	104	10	Australia	111
11	United Kingdom	98	11	Denmark	103	11	Austria	111
12	Belgium	95	12	Belgium	102	12	Belgium	110
13	Germany	95	13	Italy	102	13	Japan	109
14	Austria	91	14	Finland	101	14	Germany	106
15	Italy	89	15	Germany	100	15	Sweden	103
16	Norway	89	16	Netherlands	100	16	Finland	102
17	Finland	86	17	Australia	100	17	United Kingdom	100
18	Japan	85	18	United Kingdom	99	18	Finland	99
19	Iceland	83	19	New Zealand	84	19	New Zealand	98
20	Spain	67	20	Spain	74	20	Ireland	82
21	Ireland	56	21	Ireland	70	21	Spain	81
22	Greece	53	22	Portugal	59	22	Portugal	73
23	Portugal	47	23	Greece	57	23	Greece	72
24	Mexico	37	24	Mexico	32	24	Mexico	66
25	Turkey	28	25	Turkey	29	25	Turkey	59
							Czech Rep.	38
							Poland	37
							Mexico	28
							Turkey	
							EU15	99
							OECD	100

NOTE: PPP Per Capita GDP in OECD Countries Relative to OECD Average=100. 1970, 1990, and 1995 data are from Assar Lindbeck's *The Swedish Experiment*, page 33. We procured 2000 data from OECD. *Main Economic Indicators*. Paris: OECD, September 2000.