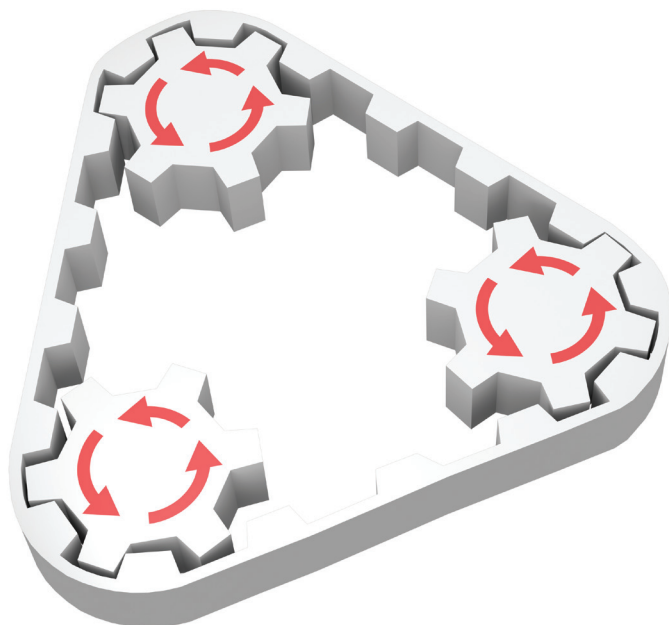




Richard B. Freeman

Little Engines that Could:

Can the Nordic economies maintain their renewed success?



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NordMod 2030. Sub-report 3

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ISBN 978-82-324-0009-6 (paper edition)

ISBN 978-82-324-0010-2 (web edition)

ISSN 0801-6143

Cover illustration: illustratorer.com

Cover: Bente Fausk

Printed in Norway by Allkopi AS

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Preface

The Nordic countries share a number of distinguishing features. With their small economies, well-developed welfare states and organized labour markets, they have given rise to the concept of “the Nordic model”. This social model or models have occasionally been met with criticism: It has been claimed that they are characterized by over-inflated public sectors and excessive tax levels, as well as rigid labour markets caused by strong trade unions, comprehensive collective bargaining and regulations. In recent years the models have attracted positive global attention, since the Nordic countries have demonstrated good results in terms of growth, employment, gender equality, competitiveness, living conditions and egalitarianism when compared to other countries. This ability to combine efficiency and equality has spurred debate in politics as well as in social research.

The Nordic models are facing a host of new challenges, and cannot afford to rest on their laurels. The fallout from the financial crisis has entailed a stress test of Nordic institutions and traditional policy measures. External change in the form of increased global competition, climate problems, migration and European integration, interacting with internal change associated with an increasing, ageing and more diverse population, urbanization and rising expectations with regard to health services, education and welfare in general, will be a test of these models’ resilience. A core issue is whether the social actors will be able to encounter these challenges by renewing the institutions and policies without jeopardizing goals for a fair distribution, balanced growth, full employment and the political support for the models.

NordMod – Erosion or renewal in the Nordic countries 2014–2030?

NordMod2030 is a joint Nordic research project studying the impact that international and national development trends may have on the Nordic social models. The purpose of the project is to identify and discuss the risks and challenges that these countries will need to cope with in the years up to 2030. The project’s goal is thus to produce knowledge that can serve as a basis for designing strategies for reinforcing and renewing the Nordic social models.

The main report from the project will be submitted in November 2014. Until then, a number of sub-reports will be published and open seminars will be arranged in all the Nordic countries. The sub-reports will present specific analyses of selected topics,

while the main report will incorporate all the findings and draw the main conclusions. All activities will be posted on the project's website: www.nordmod2030.org.

- The first sub-reports describe the fundamental pillars of the Nordic models, challenges associated with future demographic change, changes in tax policies and how globalization affects the frameworks of the models. The goal is to analyse external and internal forces of change in the models.
- Country studies are undertaken in each of the five countries to describe development trends from 1990 to 2013. These country reports present analyses of changes in financial, social and political indicators associated with key objectives, institutions, policies and social outcomes in the national context. The country reports also provide input to the analysis of challenges facing the models in each of the countries.
- Finally, a series of thematic reports will be prepared on the basis of Nordic comparisons in the areas of integration, welfare state policies, the future of the collective bargaining model, climate challenges and democracy/participation. The discussion of issues related to gender equality will be integrated into all the reports.

Nordic research group

The research project will be undertaken by a Nordic research group consisting of two representatives from each country and is headed by Fafo. The paired researchers from the different countries will be responsible for the country studies, and will provide input to the design of the other country reports. Several researchers will also contribute to the other sub-reports.

Denmark: Lisbeth Pedersen (Research Director, SFI – The Danish National Centre for Social Research) and Søren-Kaj Andersen (Head of Centre, FAOS, Copenhagen University).

Finland: Olli Kangas (Professor, Director, Kela – The Social Insurance Institution of Finland) and Antti Saloniemä (Professor, University of Tampere).

Iceland: Katrín Ólafsdóttir (Assistant Professor, Reykjavik University) and Stefán Ólafsson (Professor, University of Iceland).

Norway: Jon M. Hippe (Managing Director, Fafo), Tone Fløtten (Managing Director, Fafo Institute for Labour and Social Research), Jon Erik Dølvik (Senior Researcher, Fafo), Øyvind M. Berge (Researcher, Fafo).

Sweden: Ingrid Esser (Assistant Professor, SOFI, Stockholm University) and Thomas Berglund (Assistant Professor, University of Gothenburg).

In addition to this core group, other researchers will also contribute to some of the subreports: Richard B. Freeman (NBER, Harvard), Juhana Vartiainen (VATT), Jan Fagerberg (UiO), Line Eldring (Fafo), Anne Britt Djuve (Fafo), Anne Skevik Grødem (Fafo), Anna Hagen Tønder (Fafo), Johan Christensen (EU European University Institute (EUI), Florence) and others.

Project organization

The project has been commissioned by SAMAK – the cooperation forum for the Nordic trade union organizations and the Nordic social democratic parties. For the duration of the project period, SAMAK has also entered into a cooperation agreement with FEPS (Foundation for European Progressive Studies) concerning contributory funding. The commissioning agent (SAMAK) has appointed a reference group consisting of two resource persons from each of the Nordic countries. Although the reference group may provide input, the authors are solely responsible for the project reports. This means that SAMAK as an institution or the members of the reference group have no responsibility for the content of individual reports.

Oslo, April 2013
Jon M. Hippe
Project Director

Introduction

“Puff, puff, chug, chug,” went the Little Blue Engine. “I think I can- I think I can- I think I can ..” Up, up, up. Faster and faster the little engine climbed until at last they reached the top of the mountain. And the Little Blue Engine smiled and seemed to say as she puffed steadily, “I thought I could. I thought I could. I thought I could.” – The Little Engine that Could, child story, 1930 ¹

The Nordic economies performed better than most advanced economies in the early years of the 21st century. Sweden, Norway, Finland, and Denmark scored high on the indicators that the World Economic Forum, Fraser Institute, and other groups use to rank economic performance. Only Iceland did not obtain high ranks for an advanced economy. All five Nordics ranked among the top economies on the United Nation’s Human Development Index and other indicators of economic well-being. While the countries had divergent experiences in the Great Recession and ensuing recovery, all maintained higher employment population rates and lower unemployment rates than the US and most EU countries and with the exception of Iceland, whose banking system collapsed, maintained strong government financial balances and relatively low debt to GDP rates. Sweden, Denmark, and Finland protected jobs reasonably well in the face of large drops in GDP. The largest Nordic economy, Sweden, had one of the strongest recoveries among advanced countries. Recognizing these performances, in February 2013, the Economist anointed the Nordics as “The next (economic) Supermodel” and told politicians “on both right and left” that they had much to learn from Nordic experience.² Twenty years earlier, the Nordic countries, particularly Sweden and Finland, had been economic disaster zones, which led many to declare the end of the large social welfare state.

How did the Nordics surmount the financial and economic disasters of the early 1990s to attain peak model status twenty years later? Analysts on the right identify Nordic success with reduced government spending and taxes and the market-oriented

¹ Wikipedia (http://en.wikipedia.org/wiki/The_Little_Engine_That_Could) cites Plotnick (2012) that the story’s signature phrase “I think I can” first occurred in print in a Swedish journal in 1902. Note the feminine “she” for the little engine.

² The Economist, <http://www.economist.com/printedition/2013-02-02>

reforms that social democrats and conservatives introduced to help the economies regain their footing from the early 1990s crisis.³ Analysts on the left identify success with the flexibility of the collective bargaining system and tax and transfer policies that maintained the narrowest income distributions in the world; investments in education and science that place the Nordics high in the knowledge economy; and a political economy that puts employment at the center of economic policy.

Can the Nordics maintain their top model performance in the changing global economy?

The history of economies that analysts and commentators label as peak economic systems is not promising. In the 1970s, the left hailed “neo-corporatist” economies, including those in Scandinavia, for responding better to the oil shock crisis than more market-driven economies. In the 1980s, Japan’s catch-up with the US led many to view Japan’s lifetime employment, job rotation, and industrial policies as making Japan Number One. A decade later the “great American jobs machine” convinced international economic agencies that labor markets that relied primarily on market forces performed better than more institution-driven labor markets. But in each case, within a few years the peak economy’s performance regressed to that of other advanced economies. Being the Economist’s next supermodel could be the equivalent of the winners’ curse in auctions or the *Sports Illustrated* cover jinx.⁴

In this paper I examine how the Nordics moved from economic disaster to candidate peak model and assess the potential future of the Nordic Model in a volatile global economy. The paper is divided into three sections. Section one analyzes some of the metrics that convinced the Economist and others that the Nordics got “it” right in the 2000s. My analysis points out the more variegated performance among the countries that reflects their different vulnerability to the Recession and modes of response. Section two lays out competing explanations for the why the Nordics, particularly Sweden, improved its economic performance over the 1990s and considers why the countries responded to the economic crisis with greater attention to the well-being of workers than the US and many other advanced countries. Section three highlights the dangers that the volatile and changing global economy poses to the Nordic Model and considers ways to surmount these dangers.

³ Among other changes, these include Sweden’s mandatory private pension addition to its social security system, tighter welfare benefits; school voucher bill; Denmark’s flexicurity policies in the labor market; modification of the Ghent systems in Sweden, Denmark and Finland that gave unions a virtual monopoly on paying unemployment benefits; limitations on unemployment insurance and sickness benefits.

⁴ http://en.wikipedia.org/wiki/Sports_Illustrated_cover_jinx

1 Next Supermodel Economic Performance?

Nordic candidacy for top model of advanced capitalism rests on three bodies of evidence: the resilience of the Nordic economies in the Great Recession and ability to maintain relatively high employment rates and low inequality through this difficult period; their fiscal performance in the period; and the high ratings that diverse groups give the Nordics on indicators of future success in the digital global economy of the 21st century. Each body of evidence shows, however, considerable variation among the countries that reflects their varying circumstances and responses.

Great recession experience

The extent to which the Nordics outperformed other countries in the years surrounding the Great Recession depends in part on the years, countries, and measures of performance that one examines. I consider the 2000s before the Great Recession; the recession and the subsequent recovery. I contrast the performance of Sweden, Denmark, Norway, Finland, and Iceland with that of the US and European Union. Because of the differences in the sizes of the countries, I give most attention to Sweden and the least attention to Iceland. My measures of performance are: GDP; employment, unemployment and the duration of unemployment in total and for prime-age workers and younger workers; manufacturing output and employment; and government finances and stock market indexes.

Table 1 records changes in GDP and employment in the Nordic countries and for comparison in the US, and the EU from 2000 to 2007 (the pre-recession period), in 2007 to 2009 (recession) and 2007 to 2012 (recovery). Prior to the Recession, the Nordic countries had a varied but generally positive record in growth of GDP and employment. The growth of GDP was faster in Sweden and Finland than in the EU and US – a continuation of the 1990s recovery from their early-1990s financial and economic difficulties. Norway's GDP grew at about the same rate as US GDP. Iceland had an extremely rapid growth of GDP due primarily to its banking bubble. Only Denmark had a smaller increase in GDP than the US and the EU. The growth rates of

employment were generally smaller than in the European Union because of the already higher employment rates in the Nordic countries. Denmark's employment growth was, however, weak while Iceland's boom raised employment markedly.

All of the Nordics except for Norway took large hits in GDP in the 2007-2009 recession, led by Finland whose GDP dropped 8.2% in the period. Sweden's GDP fell by 6.5% and Denmark's GDP fell by 5.8%, far larger declines than the US (-3.5%) and Euro area (-4.0%). The subsequent recovery was strongest in Sweden so that by 2012 GDP had recovered from the shock to exceed its 2007 pre-recession level, but less strong in Finland, Denmark and Iceland, which had not recovered GDP as of 2012. Norway recovered from its relatively modest dip in GDP by 2011. Nordic recovery in employment was markedly better save for Denmark so that by 2012 employment in Sweden and Norway exceeded their levels in 2007 whereas in the US and the Euro Area employment was lower in 2012 than in 2007. But the Nordics were not the only countries in which employment increased from 2007 to 2012. The line "other top performers" lists non-Nordic countries that had relatively good growth of GDP and employment.

Table 2 records the OECD's harmonized unemployment rate for the entire civilian labor force and employment-population rates for all persons aged 15-64 and for persons with upper secondary and tertiary education in 2007 and 2012. The unemployment rates show a striking change between the Nordics and the US. In 2007 the rate of unemployment in the US put it in the middle of the Nordics, with a lower unemployment rate than Sweden and Finland but a higher unemployment than the other countries. Between 2007 and 2012 the rate of unemployment increased in all advanced countries except for Germany and Korea. The increase in the US put its unemployment rate above that of all of the Nordics. The employment-population rates tell a similar story. Prior to the Great Recession, the Nordics and the US topped OECD tables with high employment-population rates. Between 2007 and 2012 the employment-population rate fell in the US by 4.7 percentage points as the country experienced a "jobless recovery" while declining less in Sweden, Norway, and Finland. The Nordics whose employment-population fell as much as in the US were Denmark, whose flexicurity policy meant job loss in the economic downturn, and Iceland. The employment-population rates for persons 25-64 with given levels of educational attainment – upper secondary schooling and tertiary schooling – show that the Nordics had smaller declines in employment rates among upper secondary graduates than the US and generally maintained employment rates among tertiary graduates compared to a 3.3 drop for US persons with college or university education.

Employment experiences by age

The Recession and recovery affected prime age, older, and younger workers differently among the countries due to differences in employment protection legislation, retirement policies, and educational and apprenticeship programs. Table 3 compares the employment and unemployment experience of prime-age workers, defined as those between 25 and 64 years old, in the Nordic countries, the US and EU. The employment-rates show a better recovery in employment for these workers in all of the Nordics save Iceland and EU than in the US. Sweden had a higher employment rate in 2012 than in 2007, Norway and Finland had just a slight drop in the employment rate, while the US had a 3.9 point drop.

Because American workers are more likely to hold full-time jobs and have short vacation and holiday time than workers in the Nordic countries, the hours worked by employed Americans exceed hours worked by employed Nordics. Until the recession and recovery the difference in hours worked was sufficiently large that the US was the lead country in hours worked per adult of working age even though the Nordics had higher employment to population ratios. This changed among prime age workers in the recovery period. Comparing the US and Sweden between 2007 and 2012 annual hours increased slightly in Sweden and fell slightly in the US, reducing the US hours edge. The result of the reduced US edge in hours and increased Swedish edge in employment rates was that in 2012 Sweden generated more hours worked per prime age worker than the US – the first time since the OECD began reporting annual hours that a Nordic country generated more hours per working age adult than the Americans.⁵

The figures on the proportion of unemployed persons aged 25-64 years old with spells of a year or more unemployment show an even more striking difference between the Nordics and US and EU. In 2007 the US had the lowest proportion of workers with year or more spells of unemployment (with the exception of tiny Iceland). The Nordics had reasonably low proportions with such long spells as well, far below the 43% figure for the EU15. In the Recession the length of unemployment spells increased so greatly in the US that the Bureau of Labor Statistics began to ask workers about spells of several years duration. From 2007 to 2012 the proportion of the unemployed with spells over a year nearly tripled in the US while the average for Nordic countries increased more modestly, as declines in the proportion of the unemployed with spells of a year or more in Norway and Finland and a moderate increase in Sweden offset larger increases in Denmark and Iceland. In 2012 the big welfare states of Norway, Sweden and Finland had shorter spells of unemployment than the small welfare state US.

⁵ In 2012 the OECD reports an average annual hours worked of 1621 in Sweden compared to 1790 in the US – an 10.4% hours gap. The gap in the table in employment-population is 14.0%. Hours data from OECD Employment Outlook 2013, table K, where hours refer to hours for all workers. Estimates in hours worked per week and weeks worked per year between the two countries give a similar picture.

Among youths, the unemployment rates in table 4 vary considerably among the countries in 2007 and 2012, with the differences in levels due in part to differences in school-attending rates and the ways in which youth enter the job market. The low Danish and Norwegian rates of unemployment in 2007, for example, arguably reflects their apprenticeship programs. Between 2007 and 2012 the rate of youth unemployment increased in all of the Nordic countries, at very different rates, and in the EU15 and US as well. Because so many youths are in education or training, many analysts favor a different measure of the problems youths have in moving toward work – the proportion who are neither in employment, education, or training – the “NEET” – either unemployed or idle. The statistics for NEET in table 4 show a marked advantage for the Nordic countries compared to the US and EU15. The proportions of youth neither working nor improving their skills in all of the Nordic countries are in single digits compared to double digit rates for the EU15 and US. Whereas Sweden and Finland had higher youth unemployment rates than the US they have much lower rates of youths in the NEET category. The final two columns in table 4 present another measure of the difficulties youths have in obtaining work or finding some productive alternative – the proportion unemployed for over a year. This proportion was smaller in all of the Nordic countries than in the US and EU15 in 2007 and the gap between the Nordics and the US and EU15 increased through 2012.

Manufacturing employment productivity

Because GDP includes government, whose output is not priced on markets, comparisons of GDP between the Nordic countries with large government shares of GDP with GDP in countries with smaller shares of government can be misleading. Price deflators for government services as well as other services often do not take account of quality and rarely consider the value of time of consumers. On the notion that the most accurate measures of output are for manufacturing, Table 5 displays rates of change of output, labor inputs, and productivity in manufacturing for the Nordic countries and the US from 2007 to 2009 when the recession had its biggest impact on jobs and in the subsequent 2009 to 2011 recovery.

The table shows differences among the Nordics and between the Nordics and the US in the effect of the recession on manufacturing production. Sweden and Finland had huge drops in production; the US and Denmark had large but smaller drops; while manufacturing in Norway was only modestly impacted. The most striking difference in employment responses is between Sweden and the US. Manufacturing firms in Sweden (and Finland, as well) sacrificed productivity to preserve jobs in the recession at extraordinary rates. Sweden had a 25.4% loss of output and a job loss of 9.5%. In

the US, by contrast, manufacturing firms dismissed workers readily, so that output and employment fell commensurately: a 15.3% loss of output was associated with a 14.4% loss of jobs – a greater job loss accompanying a smaller drop in output. Productivity *per hour* fell by 15.7% in Sweden and increased by 2.2% in the US.

Whether it is better for an economy to sacrifice productivity to save jobs in the short run or to dismiss workers rapidly in a recession depends on how quickly firms regain productivity in recovery and how quickly either they rehire workers in the recovery or how quickly the displaced workers gain jobs elsewhere in the economy. In Sweden, manufacturing productivity per hour increased more rapidly from 2009 to 2011 than in the US so that productivity had recovered smartly by 2011 to be 3.5% above its 2007 level. Still, Swedish productivity growth fell short of US manufacturing productivity growth, which was 15.8% above its 2007 level in 2011. Manufacturing output in the US in 2011 had essentially reached its pre-recession level while employment was 17% lower than its pre-recession level. Swedish manufacturing output was 5% lower and employment 10% lower. The increased share of US workers with over one year of unemployment shown in table 3 indicates that the job losers from manufacturing did not find work readily elsewhere in the economy.

All told, the employment and unemployment performance and to a lesser extent the output performance of the Nordic states in the recession and recovery compares favorably to that of the US and that of the European Area as a whole. But, in contrast to the Economist picture of a single new Supermodel, the evidence shows sufficient differences among the Nordics to show that per the title of this paper, they are better viewed as little engines rather than as a single engine that could.

Financial performance

Table 6 summarizes how the Nordics did in in terms of their fiscal and debt performance relative to GDP and gives comparative figures for the US and Euro area. The Nordic record in limiting fiscal deficits and the build up of debt relative to GDP (with the exception of Iceland due to its financial crisis) while still dampening the adverse effects of the recession on employment makes a strong case for considering the Nordic Model(s) for top-model status. Coming into the recession, the Nordic governments had positive financial balances, the result of their strong fiscal stances taken after the 1992-93 crisis. Government financial balances declined by 4 to 8 points in the recession, which presumably helped stimulate recovery, and then moved unevenly and slowly toward balance afterward. Because of its oil resources, Norway is an extreme outlier in having a continuous positive fiscal balance but from 2007 to 2009 the Norwegian fiscal balance declined by about as much as the balances of the other Nordic countries.

Ranking the 31 countries in the OECD data base by their 2011 financial balances from the most positive (=1) to the most negative (=31) the Nordics (exclusive of Iceland) have an average rank of 4. OECD debt to GDP ratios also place the Nordics at the top of countries with strong financial situation, with an average rank of 7.25 in gross debt/GDP and 4.25 in net debt/GDP, where high ranks reflect low amounts of debt.

Finally, although stock markets are finicky predictors of economic well-being and future economic developments, the stock indexes for Denmark (Copenhagen OMX 20) and Norway (tOBX Oslo) recovered their losses from the financial implosion, while the stock index for Sweden (OMX 30) regained most of its loss. Market participants at least believe that those countries have successfully overcome the recession. The stock index for Finland (HEX25), however, remained far below its pre-recession peak. European stock exchanges show wide variation in recovering from the implosion-related loss of value, reflecting differing economic performances while US's Dow-Jones exceeded its pre-Recession peak in May 2013.⁶

Long-term indicators

Going beyond national income accounts data, analysts of the comparative performance of countries increasingly rely on *indicators* of socioeconomic life to benchmark how particular countries are doing and to project their likely future performance. Viewing the economy through competitive market lens, the Fraser Institute and Heritage Foundation/Wall Street indexes of economic freedom combine variables over a range of behavior, from labor and business regulations to modes of pay setting to perceived quality of the rule of law, etc. They seek to measure the extent to which economies conform to an ideal free market model where the state's primary function is to protect private property and give free rein to businesses. Viewing society from a different perspective, the United Nations' Human Development Indicator assesses "how economic growth translates - or fails to translate - into human development," which includes life expectancy, gender inequality, and years of schooling. Many other groups produce indexes of corruption or trust, innovation, readiness to conduct business through the Internet, costs of doing business, and so on that offer benchmarks for policy analysis.⁷

⁶ Stock exchange data accessed May 3, 2013.

⁷ Absent market-determined prices to reflect the importance of items, many of the groups weight variables equally into sub-indexes and weight sub-indexes equally into the aggregate indicators. Different plausible weighting schemes, say based on multivariate principal component analysis and factor analysis would alter results but are unlikely to change the main findings. Hristova's analysis of the Heritage-WJSJ index of freedom shows that some components add little to the value of the index, as often occurs in forming aggregates.

Table 7 summarizes the rank of the Nordic countries in six indicators of economic and social activity: the Human Development Indicator, the Legatum Prosperity Indicator; the Fraser Institute's index of economic freedom; the Heritage Foundation/Wall Street Journal's index of economic freedom; the World Economic Forum's competitiveness index; and INSEAD's global innovation index. The Human Development Indicator rates the Nordics highly because it emphasizes social factors on which welfare states have historically done well, such as education or gender equality. The Legatum Prosperity Index places Sweden, Norway, Denmark at the top of its ranking because seven of the eight sub-indexes for poverty relate to social factors (such as safety and security, health, and social capital, among others) whereas only one related to economic prosperity.

The economic freedom indexes rank the Nordic countries lower because these measures treat the presence of a large public sector and labor regulations/collective bargaining as inimical to market freedom. The market reforms and shrinkage of the state sector improved the rankings of Denmark, Sweden and Finland substantially in the Heritage/WSJ index of economic freedom from 1996 (the first year when the survey covered them all) through 2012.⁸ The average rating of the Nordics increased from 41 to 19. By contrast, in the Fraser Institute index only Finland improved its ranking while Norway fell sharply in the ranking from 1990 through 2010, so that the average for the Nordics dropped from 16 to 19.⁹ Including the economic freedom indexes in table 7 lowers the overall ranking of the Nordic countries below the Economist's "top of the class" rating of Sweden, Denmark, Finland, and Norway as number 1,2,3 and 4 in their average of ratings.

Because the World Economic Forum's competitiveness indicator and the INSEAD global innovation index weight scientific and technological activity heavily in their aggregate measures, the Nordics score much better in their indicators. Public financing is generally important in placing a country on the scientific frontiers and often in spurring technological developments as well. The high ranking in competitiveness reflects business executives reporting ready availability of scientists and engineers, high company spending on R&D, percent of individuals using the Internet, business willingness to delegate authority, objective measures on patents per million of population, among other things. The high ranking in innovation includes high scores for the Nordics in Wikipedia monthly edits and scientific and technical articles published relative to GDP. Indicative of the substantial achievement of the Nordics in science and technology, Sweden spends a larger share of GDP on R&D, graduates more PhDs in science and engineering per person of the relevant age group, and produces more citations per research paper than the United States. The evidence that the Nordic

⁸ The rankings for 1996 were Denmark, 29, Norway, 37, Finland 44 and Sweden 54.

⁹ The rankings for the chain-linked index for 1990 were: Denmark, 16, Norway, 19, Finland 17 and Sweden 21 Fraser Institute, *Economic Freedom of the World 2012*,

countries “punch above their weight” in science and engineering research and the high ranking they obtain in measures of innovativeness runs against the spirit of the Acemoglu, Robinson, Verdie (2012) model of the Nordics in the global economy in which their success depends on the more unequal US form of capitalism generating the big innovations that spur economic growth.

How well do country scores on indicators predict levels of GDP or future growth rates? Looking at all countries, there is a high correlation of the aggregate indicators with levels of GDP per capita. But some subindexes, such as those for size of government or labor practices that enter the economic freedom measures as adverse to a market economy, are positively correlated with GDP per capita. The substantial literature that links the economic freedom indexes to economic growth also show a robust positive relation (Doucouliagos and Ulubasoglu (2006)) though some sub-indexes are unrelated to growth (Hirstova, 2012) so the aggregate masks a more complex pattern of relations. I am unaware of analysis linking other indexes to future economic growth nor of studies that contrast the predictive power of different indexes. Conservative concerns about the adverse effects of a large state sector on growth have generated studies that link direct measures of the size of government to economic growth. This research finds little relation between the size of government and growth in samples of all countries but finds negative relations among advanced countries (Bergh and Henreckson, 2011, table 2). This correlation lies at the heart of conservative assessments of the Nordic Model.

Overall, exclusive of the economic freedom indexes which by construction give countries with large welfare states and high unionization and collective bargaining low scores, the Nordic countries stack up well in the indicators of future performance just as they do in output, employment, and government finance. But it is not the Nordics high position on any of these metrics that justifies the ballyhoo about their forming the next top model of advanced capitalism. Some other advanced countries have also weathered the implosion of finance and the Great Recession reasonably well and are positioned to progress in the future. That case for the Nordic Model rests on the success of the Nordics in combining these outcomes with the hallmark achievement of low levels of inequality in income and high living standards that have been documented in so many places that I simply take those as given in this essay.¹⁰

¹⁰ See OECD Economic Surveys: Sweden 2012, figure 1.1, p. 49, for measures of income distribution. Inequality has increased in Sweden since the early 1990s as it has in many countries but the Gini coefficient for incomes exclusive of capital gains in 2011 of 25.9 was 5.5 points below the OECD average. OECD 2012 Major Statistics of Sweden, 2011. From the mid-1990s to 2008 real disposable income increased for all income deciles, in contrast to the US, where it decreased for the lowest decile. OECD Economic Surveys: Sweden 2012, table 1.1, p 52.

2 Why Have the Little Nordic Engines Succeeded?

Twenty years ago, conservatives argued that a large welfare state was incompatible with a dynamic successful market economy. Social democrats feared that a more market-based society was incompatible with an egalitarian income distribution and low levels of poverty. From the 1990s to 2007 most analysts viewed the US as the peak capitalist economy, whose market-oriented system produced full employment and high and rising productivity, albeit at the cost of high inequality, low social mobility, and a nearly constant poverty rate.

The argument today is different. Rather than viewing the Nordic Model as a threat to economic progress, analysts on the right look for reasons why the Nordic economies have succeeded with market-oriented reforms and lower taxes and public spending that still leave them with the largest welfare states in the world. Analysts on the left view market-oriented reforms, some initiated by social democrats and some by conservatives, as realistic adaption to economic reality rather than as the antithesis of the welfare state.

Where right and left disagree is about the reasons for Nordic economic success and whether further retrenchment of the state in favor of the market would improve the economy and if so whether the improvements would reach the bulk of citizens. The conservative view is that the Nordics offset the adverse effects of a large welfare state on economic incentives and efficiency by choosing more market-oriented solutions in other social and economic domains. The left view is that progressive tax and transfer policies and collective bargaining are necessary to preserve a narrow income distribution and that economic growth requires large social investments in infrastructure and knowledge creation. Participants in the policy debate in the Nordic countries regard the differences in views as large but from the perspective of someone living in a highly polarized society, it is the comity, extent of agreement, and rational economic discourse that informs decisions that is surprising.

Table 8 summarizes some of the views in this debate as given in academic studies and journalistic or public intellectual commentary. The upper part of the table gives conservative perspectives. The lower part of the table gives progressive/social democratic perspectives.

Conservative analysts attribute Nordic success to the societies developing market-friendly policies in the production sphere that offset welfare state policies in the dis-

tribution of national income. Prior to the Great Recession, Dan Mitchell of the Cato Institute noted that “Nordic nations generally rank among the world’s most market-oriented nations” and claimed that “positive results generated by laissez fair policies in other (non-welfare state) areas” accounted for their Nordics’ success.¹¹ Graham Leach of the Legatum Institute explained that “Government is still big, but there are significant competitive forces as well, offsetting – or at least not exacerbating – the dead hand of the state”¹². His examples were effectiveness of anti-monopoly policy, reliance on professional management, and in the case of Denmark weak employment protection legislation. Reviewing econometric studies of the relation between the size of government and economic growth Andreas Bergh and Magnus Henrekson note that “Sweden and the Scandinavian countries stand out by combining high growth and high taxes” and argue that one reason is that they apply “growth-friendly policies in other areas”, as evinced in the 1980s and 1990s Scandinavian market-oriented reforms.¹³

The conservative interpretation of the Nordic model as an “odd couple” combination of large welfare state and market-oriented policies raises questions about how the system developed – by happenstance or luck; by decision makers selecting policies that fit together into a productive system; or by some invisible hand operation in political economy? To the extent that political bargaining determines policies, what has led the Nordics to reach agreements that produce good growth performance when political actors in many other countries fail to reach such agreements? What allows the Nordics to avoid crony capitalism with welfare state payoffs to particular interest groups?

Some conservative analysts argue that the answer to the development question is that the welfare state is itself a product of a high level of social trust (measured by answers to the survey question ‘In general, do you think most people can be trusted or can’t you be too careful?’). Cross section data show that trust is related to growth, to a larger state sector, and to low levels of income inequality. Bergh and Bjørnskov (2011) suggest that trust reduces free riding by citizens on welfare benefits and corruption by government officials on a welfare state and government corruption. Sadanji argues that “the high tax welfare state might have been made possible by the hard won Swedish stock of social capital” stemming from its Lutheran heritage. But it is also possible that the welfare state induces greater trust, as Rothstein (2008) has suggested. Absent any survey-based or other measures of trust a century or so ago, it is difficult to determine what causes what in this pattern of correlations and test the proposition that higher social trust created the welfare state and a higher GDP to pay for its in-

¹¹ He tempers these views with criticism of the welfare for reducing economic performance, citing as one example the longer duration of joblessness in Sweden than the US. (Mitchell, p 8), which, table 3 showed has been reversed in the Great Recession.

¹² Leach (2011), p 21.

¹³ Bergh and Henrekson, pp 15-17.

efficiencies. Using cross-country regressions, Bergh and Bjørnskov instrument current levels of trust on whether a country's language allows persons to drop the personal pronoun, the cold climate, and whether the country is a constitutional monarchy, and interpret the resultant estimates on the instrument for trust as supporting the trust → welfare state interpretation. But there is no smoking gun evidence in econometric exercises like this.

Bergh (2011) interprets evidence from Roine and Waldenstrom (2008)'s investigation of 101 years of Swedish income data that inequality fell in Sweden long before the development of the big welfare state as suggesting that the welfare state had little impact on inequality.¹⁴ But Roine and Waldenstrom note that the decline in inequality prior to the 1930s was largely due to changes in capital income in the top percentile “while the lower half of the top decile – consisting mainly of wage earners – experiences virtually no change over this period”. Indeed, including capital gains, “Sweden's experience resembles that in the U.S. and the U.K. with sharp increases in top incomes.”¹⁵ The decrease in inequality that began around the mid-1930s, moreover, was related to wage compression, which presumably reflected in part the activities of unions beyond pure market forces.¹⁶

Abramitzky, Boustan, and Eriksson's (2012) evidence on the distribution of income for workers in Norway in the 1890s also does not support the notion that the Nordics developed greater equality at the beginning of the 20th century absent institutional interventions. Using occupational status of Norwegian immigrants to the US and of their siblings who remained in Norway to reflect incomes, Abramitzky, Boustan, and Eriksson (p 1834), report that “Unlike today, Norway had a more unequal income distribution in the nineteenth century than did the United States.”

The most striking aspect about the new conservative depictions of the Nordic model is its neglect of unions and employer federations and related institutions as essential elements in the working of Nordic economies. In its popular summary of the new conservative view the Economist's Special Report *never mentions* collective bargaining and references unions only in passing.¹⁷ Given the near uniform finding in

¹⁴ Bergh suggests that policies and institutions beyond increased taxes and revenues explain the fall in inequality prior to the expansion of the welfare state: land reforms, trade unions and centralized wage bargaining, primary school reforms, and the introduction of social insurance schemes (and also suggests a role for increased female labor participation. All of these factors are part of institutional interventions to accomplish the same ends as a welfare state.

¹⁵ Roine and Waldenstrom (2008), p. 366.

¹⁶ Bjorklund, Roine and Waldenstrom (2012) find that in recent years intergenerational transmission the top 0.1 percent of the income transmission has been very strong, due to transmission of wealth.

¹⁷ Its references to unions are: “The Nordics have pushed far-reaching reforms past unions and business lobbies” (Economist 2013a) and about allowing in more skilled workers by eliminating trade unions having “veto over who was admitted and repeatedly used it” (Economist, 2013d).

labor economics that unions/collective bargaining narrow wage differentials, that wage and salary compression are a major contributor to low income inequality in Nordic countries, and the role that unions play in social democratic politics, the conservative analysis of the Nordic Model without unions and their counterpart employer federations seems like Hamlet without the Prince of Denmark.¹⁸

Progressive/Institutional views

The progressive vision of the Nordic Model places institutions, especially the economic policies of trade unions, at the heart of the system. Moene and Wallerstein (2005, 2006) identify the key innovation of the Model as a shift from market determination toward institutional determination of wages. From this perspective the 1938 Saltsjöbaden Agreement between the union federation LO and the employers association SAF mark the beginning of the Swedish version of the Model while the Rehn-Meidner analysis of how centralized or coordinated bargaining institutions should ideally set wages lies at its intellectual core.

There is a macro-economic component and a micro-economic component to this analysis. On the macro side, centralized wage setting takes wages “out of market competition and out of the hands of local unions” so that increased demand for labor, due to government stimulus in a recession or anything else, increases employment rather than the wages of incumbent workers.¹⁹ The macro-virtue of constraining wages in a recession is that it increases the efficacy of deficit spending and monetary policy in boosting employment and thus allows policy-makers to stimulate the economy at a lower cost of increasing national debt. Kielos attributes “the origin of the Danish notion of flexicurity ... (and) the social democrats’ commitment to slashing the Swedish deficit after the financial crisis of the early 1990s” to the Rehn-Meidner view that centralized bargaining and a strong safety net can substitute in part for macro policies. Dølvik, Goul Andersen, and Vartianen (2012) note that the innovations in Swedish collective agreements in the Great Recession emphasized within firm adjustments to cushion the effect of declining output on jobs rather than movements of labor across firms or sectors.²⁰ From the perspective of the US, the distinctive feature of the Nordic

¹⁸ Conservative analysts in the US, by contrast, take the opposite tack, blaming Big Labor and union bosses for the country’s economic problems despite minimal union presence in the private sector and collective bargaining that covers at most 12.5% of all workers.

¹⁹ Moene and Wallerstein, 2006, p 18.

²⁰ Their prime example is a spring 2009 agreement between IF-Metall and its employer counterpart to reduce working hours and adjust the payroll with union workers taking commensurate cuts in earnings.

effort in the Great Recession was the use of labor market policies as a macro-economic tool to buffer employment in contrast to US's almost exclusive reliance on aggregate monetary and fiscal measures to save and restore employment.

On the micro-side the Rehn-Meidner policy of bargaining to equalize wages for comparable workers across firms had the goal of accelerating productivity growth. Moene and Wallerstein describe the logic: “industries with low levels of productivity are prevented from staying in business by paying low wagesworkers in industries with high levels of productivity are prevented from capturing much of the productivity differential in the form of higher wages. By reducing profits in low-productivity firms and increasing profits in high-productivity firms, labor and capital would be induced (or coerced) to move from low productive to high productive activities, increasing aggregate efficiency as well as improving equality.”²¹ From this perspective institutional wage-setting is a pro-growth reallocation policy – a far cry from the conservative picture of the Nordic Model as a high tax welfare state saved by laissez-faire business policies.

If labor markets operated in accord with the competitive model of wage-setting in which each firm pays the market rate for labor regardless of its economic situation the Rehn-Meidner policy would be superfluous. Industries/firms with higher productivity would be more profitable and expand relative to those with low productivity, eventually driving the latter out of business. But data on earnings by firm or among establishments within a firm show large differences in pay for seemingly similar workers. Analyzing US Census files on earnings for tens of thousands of US establishments, Barth, Bryson, Davis and Freeman (2013) report not only large but increasing dispersion of earnings among establishments in the same industry and region from the 1970s to the 2000s.²² In such a setting, institutional wage-setting can produce outcomes closer to the market ideal than real world labor markets.

The institutional interpretation of the high levels of trust found in the Nordic countries and of the increased level of trust in Denmark, Sweden, and Norway from the 1980s to the 1990s compared to the decline in trust in the English-speaking market-dominated countries over the same period²³ is that it reflects low levels of inequality and welfare state safety net protections. Comparing advanced countries in the World Values Survey, Lee reports that public investments in skill raised social trust while passive social transfers lowered it. Kulin and Rothstein's (2005) analysis

²¹ Moene and Wallerstein, 2006, p 19.

²² Studies of prices for identical products, such as books, sold on the Internet also show considerable dispersion, so the notion that supply-demand interactions invariably produce a single price seems a simplification of reality in many cases.

²³ See Delhey and Newton (2005, table 1) and Cheoll Sung-Lee's (2013, table 2), whose tabulations of seventeen advanced countries in the World Value Surveys show that Norway, Finland, Sweden, and Denmark were the top four countries in trust in the 1980s and four of the top five in the 1990s.

of Swedish survey data found that universal welfare-state institutions tend to increase social trust while needs-tested social programs undermine it. But correlation studies like these cannot identify causality any more than studies that instrument measures of trust on climate or having a constitutional monarch.

Analyzing trust among immigrants to European countries Dinesen finds that trust is affected by the culture of the country of origin of immigrants and the institutional quality of the country to which they migrated, which is consistent with both an effect for cultural history and institutions. Given that workers in a small open economies face substantial risk from trade shocks, it is also possible that the social cohesion and trust depend on a wide distribution of benefits to buffer persons from the risks involved in trade. Analysts who believe that institutions are a key to the Nordic model study the links between unions and the social democratic parties with which they are involved and their bargaining with business and conservative governments, as exemplified by Anthonsen, Lindvall and Schmidt-Hansen (2011), who warn about the dangers of unions relying on politics when they cannot gain concessions from firms, and Lindville (2010), who notes the importance of reaching agreements that do not threaten their future institutional strength.

The Nordic Balance Act

Stipulate that there is some element of truth in both the conservative and progressive visions of the recent success of the Nordic model, and that the optimal performance of an economy depends on finding the right balance between institutions and markets at any point of time, and ways to move a society not at the ideal balance toward the peak. In a world subject to diverse shocks, the balance between markets and institutions likely changes frequently, so that decision-makers will always be updating where they would like to be and adjusting toward a moving target. In periods in which markets produce relatively stable economic outcomes – the Great Moderation that macro-economists thought we had achieved until Wall Street imploded – the balance may lie more on the market side. In a more volatile world – the economy post the Great recession? – the balance may lie more on the institution side.

Viewing the changing policies of the Nordic countries from the end of World War II to the present as an effort to find the balance between labor and welfare state institutions and market forces, I have been most impressed by the extent to which the two sides in the debate agree on many policy initiatives and the comity and rationality with which they disagree. When the Swedish banking system verged on collapse in 1993, conservatives and social democrats united around the same policy. In the 2007-2009 crisis, statements by the Ministry of Finance on restoring full employment were far

stronger than any comparable policy pronouncements in the US, where diverse other issues seem to dwarf the weak employment recovery and the problems of the jobless.

Three factors seem to contribute to this consensual and evidence-based approach to policy.

The first, per the *little* in the Little Engines title of this paper, is the population size of the Nordic countries. Small open economies with fewer people in total than the years' crop of graduates from Chinese universities are likely to be connected through short networks of links – smaller degrees of separation – and thus have a greater sense of community than persons in a larger country. In the US political divisions seem less at the local government and state level than at the national level, where regional and ideological divisions seem most most divisive. Size also dictates decisions on issues like free trade.

The second is the narrow income distribution, which creates common economic interests so that most people experience similar economic circumstances and thus are likely to come to similar conclusions about policies. In the US with a highly unequal income distribution, the wealthy and the poor live in different communities and experience economic developments differently. Adding to the divergence in views are differences in the racial and ethnic backgrounds between the wealthy and the poor that arise from historical circumstances and patterns of immigration.

The third factor that I see as contributing to the greater comity in dealing with economic problems in the Nordic countries than in many others are the dense web of institutions that influences decisions. Interacting through institutions means that decision-makers on one side deal with people on the other side of issues. By contrast, interacting through impersonal markets often means making decisions solely based on numbers in a spread sheet.

3 Conclusion: Maintaining Success in a Volatile Global Economy

At the outset, I noted that peak economies have had short runs at the top. The economic environment to which peak economies are presumably well adapted change in unexpected ways that require new strategies and adjustments, which they are slow to develop. When the going is good, it is difficult to see weaknesses in economic policies – if it isn't broke, don't try to change it. It also easy to forget lessons from the past – Wall Street a source of instability? That was the 1930s.

Whether the Nordics can continue their current run and escape the top model jinx, at least in the immediate future, depends both on external factors and on societal responses to them. The biggest danger comes from an increasingly volatile global economy, which can cause major economic problems even for a relatively cohesive society that seeks to meet economic challenges in as rational and level-headed manner as possible.

Hazchem! Volatile Global Economy

Today's global economy differs from classic Heckscher-Ohlin trade models where countries exchange goods and services produced within their borders on the basis of given factor endowments. Increasingly trade depends on multinational corporations who operate global value/production chains in which they subcontract tasks to locations capable of doing the work at least cost. The multinationals transfer modern technologies across country lines, which erodes the knowledge advantage that advanced countries had over developing countries. Two or three decades ago, an innovation in an advanced economy would lead to production in that economy, creating jobs for less skilled workers. Today, an innovating multinational will almost certainly produce much of the product in a low wage developing country.

Today's global economy also involves massive volatile flows of capital across borders, spurred by new financial instruments that raise and loan capital worldwide. In 2003 the Managing Director of the IMF declared that "globalization of financial markets has been accompanied by devastating financial crises in emerging market economies

... over-indebtedness and massive reversals in capital flows, leading to severe recession accompanied by a sharp rise in unemployment.” Fast forward ten years and the statement holds for market economies, with some additional reference to sovereign debt and austerity programs.

Today’s global economy also involves substantial immigration of both less skilled and highly skilled labor moving from developing countries to advanced countries. The flow of low skilled workers fits with factor endowments, potentially reducing the wages of low paid residents and creating problems for national collective bargaining systems that seek to narrow the wage distribution (Dølvik, Eldring and Visser, 2012). When labor demand is weak, the immigration stokes nativist sentiments in virtually every country. But at the same time many skilled persons, often international students obtaining degrees in an advanced country, seek to stay there, and advanced countries compete for them to help maintain the innovation necessary for modern economic growth.

The surprise in the global economy is the speed with which developing countries have increased the number of university graduates in the past twenty-thirty years, and thus has changed their skill endowments. In 2010 85% of enrollments in colleges and universities (“tertiary institutions”, as defined by the United Nations) were in developing countries. China graduated 6 million persons from universities, many in engineering and science, graduated more PhDs in science and engineering than the United States, and sent tens of thousands to earn PhDs in advanced countries. The highly populous developing countries have enough highly educated workers to compete with advanced countries in high-tech production.

Trade via multinational production chains, increased global capital flows, immigration of skilled as well as less skilled workers, and extension of knowledge and higher education – create a world of changing factor endowments and technological competencies and potential instability.

As best I can tell, these developments pose three dangers to the continued success of the Nordic Model:

(1) Potential collapse of the major European markets for Nordic goods and services²⁴ due to economic contraction/collapse of countries with economic and financial problems locked into single currency in the EU. Without highly mobile labor to move from areas that suffer negative economic shocks to more prosperous areas or a strong central body to send fiscal support to stimulate areas suffering from negative shocks, the Euro zone always seemed a risky experiment in economic policy. Joining the Euro meant giving up a flexible exchange rate with no other policy instrument to deal with adverse shocks affecting some but not other Euro members. It is no coin-

²⁴ About 2/3rd s of Sweden’s trade is with EU countries. The four countries with the greatest exports are Germany, UK, Norway, and US. Asia has risen to 13 percent of Swedish exports, making it the largest single region outside Europe.

cidence that Finland which uses the Euro and Denmark, which pegs its currency to the Euro have generally performed worse in the 2000s than Sweden and Norway. It is difficult to imagine how Iceland could have recovered as well as it did if its currency did not devalue massively. The danger to the Nordics is that the alternativlos austerity policies of the EU toward Greece, Spain, and Portugal have locked them into one or two decades of economic decline, which will keep the EU in a depressed economic state for at least a decade or lead them to quit the currency in ways that will further destabilize European recovery.

(2) A second global banking and financial crisis due to the leveraging of banks-too-big-to fail and the complex interconnections of financial institutions that governments and international regulators have yet to measure fully. The big lesson from the 2008 implosion of Wall Street and ensuing Great Recession is that the global economy harbors one extremely dangerous sector – banking and finance – whose practices can destroy economies. Deregulation of the finance sector, which was supposed to reduce risks by spreading them widely and to direct capital to its most productive uses, produced the the opposite through leveraging, speculation, and caveat emptor rent-seeking that exacerbated financial bubbles and destroyed economic value.

After the crisis, many persons anticipated that the Western democracies would move swiftly to clean up the banking and finance mess, re-institute strong controls on the sector and seek reforms to restore it to its proper role as a facilitator of increased productivity and innovation in the real sector. This is what Sweden did when it reformed its financial system in the 1990s and what the US did in the 1980s savings and loan crisis. This did not happen. Financial regulators have sought to limit the riskiness of big banks but the banks have pushed back with some success. As long as they can profit from leveraging and raising risks, they will seek to do so. For all the talk about systemic risk, there is neither the data to measure systemic risk to the system nor policies to prevent another implosion. The danger to the Nordic countries comes from collateral damage to another Wall Street or London or even Shanghai meltdown. With the world not fully recovered from the Great Recession, the impact on small open economies would presumably be immense.

(3) Trend shifts in the center of gravity of world production and consumption to low-wage developing countries, particularly in Asia. The extension of market capitalism and modern technology to the developing countries of the world is one of the great successes of the globalization policies of the past 20-30 years. Proponents of globalization sold it as a gain to all, but neither economy theory (think factor price equilibrium) nor evidence (see for instance, Autor, Dorn and Hanson (2012)) supports such a Pollyanish view of the globalization project. Some workers and firms invariably will lose to overseas competitors. Trend shifts go on inexorably but provide time for economic agents and governments to choose appropriate strategies to adjust to the trends. Taking China as the key Asian low wage economy, its national

investments in education and research and Chinese firms purchases of foreign firms, from Lenova's buying IBM's personal computer business to Zhejiang Geely Holding Group Co's purchase of Volvo change national comparative advantage, and the pressures on domestic firms and workers. But they also create huge market opportunities for advanced economies, from tourism (China's middle and upper class have been the world's largest and highest spending tourists) to developing and selling innovative products that meet the demands of billions of people with newly acquired income and wealth. The danger is not NAFTA opponent Ross Perot's "giant sucking sound" of jobs leaving advanced countries from trade,²⁵ but of failing to find the most beneficial way of adjusting to the new economic reality.

The Nordic economies managed better than most advanced economies in dealing with the Great Recession and buffering workers from mass joblessness and poverty, and they seem better situated to deal with dangers of further negative shocks from the global economy.

If the European economy suffers a major decline, the Nordic countries are better situated fiscally to respond than other European economies. If the world financial system implodes again, the reforms in the Nordic banking system from the 1992-93 disaster also gives them greater protection than the banks and finance sectors of many other countries. With high levels of R&D and large numbers of scientists and engineers and other highly educated workers and production of scientific papers, the Nordics should be able to benefit from the shift in the world economy toward the developing countries and turn the danger of low wage competition into the benefits of trade with growing markets. In short, the Nordic economies seem likely to do better in a potentially gloomy world economy than most other advanced countries.

²⁵ http://en.wikipedia.org/wiki/Giant_sucking_sound

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Tables

Table 1: Percentage Changes in GDP and Employment, Nordic Countries and Comparators, 2000-2012

Country	Pre-Recession, 2000-2007		Recession, 2007-2009		Recovery 2009-2012	
	% Change GDP	% Change in Employment	% Change GDP	% Change in Employment	% Change GDP	% Change in Employment
Sweden	23.1	7.1	-5.6	-0.9	11.3	3.5
Denmark	11.8	3.1	-6.4	-1.1	2.3	-2.9
Norway	17.1	7.6	-1.6	2.6	5.3	3.3
Finland	25.2	6.6	-8.2	-2.1	4.8	1.7
Iceland	36.8	13.5	-5.4	-5.1	0.3	0.6
Euro Area	14.6	9.7	-4.0	-0.8	2.8	-0.7
US	17.8	6.8	-3.5	-4.2	4.2	1.9
Other top Performers	Ireland, Korea, Spain, UK, New Zealand, Australia, Korea		Korea, New Zealand, Australia, Switzerland		Korea, New Zealand, Australia, Switzerland	

Source: OECD, stats.oecd.org, with employment as total employment and GDP measured in constant currency units for each country. Euro area is Euro15 for employment; Euro17 for GDP

Table 2: Harmonized Unemployment Rates, and Employment/Population Rates, 2007-2012

Country	Unemployment Rates		Employment-Population Rates for:					
	Civilian Labor Force		Total 15-64 year olds		Upper secondary*		Tertiary*	
	2007	2012	2007	2012	2007	2011	2007	2011
Sweden	6.1	8.0	74.2	73.8	83.1	83.5	88.6	88.7
Denmark	3.8	7.5	77.0	72.6	82.5	79.0	87.8	85.8
Norway	2.5	3.2	76.9	75.8	84.0	81.7	90.4	90.5
Finland	6.9	7.7	70.5	69.5	76.2	74.7	85.2	84.3
Iceland	2.3	6.0	85.7	80.2	83.2	83.4	88.6	88.8
EU 15	7.0	10.6	67.0	65.6	75.8	na	85.1	na
US	4.6	8.1	71.8	67.1	73.6	67.1	83.3	80.0

Source: OECD, Employment Outlook, 2013, with EU15 unemployment employment population from OECD-Statextracts

* 25-64 years old. Figures for 2007 upper secondary and tertiary education groups from Employment Outlook, 2009, table D

Table 3: Employment/Population, Unemployment Rates, Pct Unemployed >One year, 25-64 year old "Prime Age" Workers, 2007-2012

Country	Employment/Population		Unemployment Rates		% Unemp > One year	
	2007	2012	2007	2012	2007	2012
Sweden	82	82.3	4.3	5.8	16.4	22
Denmark	79.4	76.8	3.2	6.5	16.6	33.8
Norway	82	81.5	1.8	2.4	11.8	10.9
Finland	76	75.6	5.5	6.2	25.9	24.3
Iceland	88.5	83.8	1.3	4.5	8.6	32.1
EU 15	72.4	71.3	6	9.3	43.2	45.7
US	76.1	72.2	3.6	6.8	11.1	31.5

Source: OECD, <http://www.oecd.org/employment/emp/onlineoecdemploymentdatabase.htm>

Table 4: Workers Aged 15-24, Unemployment Rate, Unemployed Over one year and Percentage Not in Education, Employment, or Training (NEET), 2007-2012

Country	Unemployment Rate		NEET Rate	%Unemployed > 1 year	
	2007	2012	2011	2007	2012
Sweden	19.2	23.7	6.8	3.3	6.1
Denmark	7.5	14.1	5.7	4.2	9.0
Norway	7.3	8.6	9.2	2.6	2.9
Finland	15.7	17.8	8.6	5.5	5.7
Iceland	7.2	13.6	5.9	(1.5)*	10.4
EU 15	14.9	22.2	13.2	22.8	31.5
US	10.5	16.2	14.8	6.5	18.2

Source: OECD, <http://www.oecd.org/employment/emp/onlineoecdemploymentdatabase.htm>

* No figure reported; 2006 and 2008 had reported 1.5 so that seems reasonable approximation.

Table 5: Differential Responses of Manufacturing in Recession and Recovery

Output, Employment, and Hourly Productivity in Recession: 2007-2009

Country	Percentage change in output	Percentage Change in employment	Percentage change in hourly productivity
Sweden	-25.4	-9.5	-15.7
Finland	-29.3	-5.5	-20.1
Denmark	-14.4	-8.3	-4.6
Norway	-3.5	-3.6	3.9
US	-15.3	-16.5	2.2

Output, Employment, and Hourly Productivity in Recovery: 2009-2011

Country	Percentage change in output	Percentage Change in employment	Percentage change in hourly productivity
Sweden	27.2	3.6	22.7
Finland	11.3	-4.5	11.0
Denmark	3.0	-8.3	11.3
Norway	4.2	-4.0	6.6
US	16.0	-1.4	13.4

Source: Bureau of Labor Statistics, Productivity and Unit Labor Costs in Manufacturing Data tables, 1950-2011

Table 6 Financial Performance of Nordic Countries, 2000-2012

General Government Financial Balances, by year

Country	2000	2007	2009	2012
Denmark	2.2	4.8	-2.8	-4.1
Finland	7.0	5.3	-2.7	-2.3
Norway	15.4	17.3	10.6	13.9
Sweden	3.6	3.6	-1.0	-1.1
Iceland	1.7	5.4	-10.0	-3.4
US	1.5	-2.9	-11.9	-8.7
Euro area	-0.1	-0.7	-6.2	-3.7

General Government Gross Financial Liabilities

Country	2000	2007	2009	2012
Denmark	60.4	34.3	51.3	58.9
Finland	52.4	41.4	51.8	63.3
Norway	32.7	56.8	48.9	34.8
Sweden	64.3	49.8	52.2	48.7
Iceland	72.9	53.3	120.0	131.8
US	54.8	66.5	88.8	106.3
Euro area	76.0	71.9	87.8	103.9

OECD, Economic Outlook 2012 issue 2, 92 Annex table 27 and Annex table 32
 Economic Outlook 2012, issue 1, tables for individual countries.

Table 7: Rank of Countries by Long term indicators, 2010-2012

	Human Development (UN)	Prosperity (Legatum)	Economic Freedom (Fraser)	Economic Freedom (Heritage)	Competitiveness	Innovation
Nordic average (exclusive of Iceland)	11	3.25	20	18.5	8.5	6.75
Sweden	7	3	30	18	4	2
Denmark	15	2	16	9	12	7
Norway	1	1	25	31	15	14
Finland	21	7	9	16	3	4
Iceland	11	15	65	23	30	18
Germany	5	14	31	19	6	15
Japan	10	22	20	24	10	25
US	3	12	18	10	7	10
Other top Performers	Australia, Netherlands, New Zealand, Ireland, Switzerland	Australia, New Zealand, Canada, Netherlands, Switzerland, Luxembourg	Hong Kong, Singapore, New Zealand, Switzerland, Australia, Canada, Bahrain, Mauritius, Chile	Hong Kong, Singapore, Australia, New Zealand, Switzerland, Canada, Mauritius, Chile	Switzerland, Singapore, Netherlands, Hong Kong	Switzerland, Netherlands, United Kingdom, Singapore, Hong Kong, Ireland
# Countries	186	142	144	177	144	141

Source:

http://hdr.undp.org/en/media/HDR2013_EN_Summary.pdf

<http://www.prosperity.com/Ranking.aspx>

<http://www.freetheworld.com/2012/EFW2012-complete.pdf>

<http://www.heritage.org/index/ranking>

http://www3.weforum.org/docs/WEF_GlobalCompetitivenessReport_2012-13.pdf

[http://en.wikipedia.org/wiki/Global_Innovation_Index_\(Cornell_University,_INSEAD_and_WIPO\)](http://en.wikipedia.org/wiki/Global_Innovation_Index_(Cornell_University,_INSEAD_and_WIPO))

Table 8: New views of the Nordic Model

Analyst	Perspective on Nordic Success
Mitchell (Cato Institute 2007)	Lagging economic performance due to excessive government and large welfare state. But “much to applaud” in open markets, low regulation, strong property rights, pro-market reforms, low corporate tax rates, partial privatization of social security. “Nordic nations are reasonably successful in spite of the welfare system”
Leach (Legatum Institute, 2011)	Over long run size of state and growth negative trade off from rich countries. Nordics grow with compensating free market policies, particular anti monopoly policy. Doubts role of trust (p24). Shrinkage of state has returned growth to earlier high levels.
Bergh and Henrekson (2011)	Among advanced countries larger government sectors are associated with lower rates of growth. But welfare states with high taxes can compensate for negative growth effects from large government through market oriented growth-promoting policies and institutions.
Bergh (2011)	Sweden’s economic performance and low inequality preceded expansion of the welfare state. Economic performance in Great Recession due to market-oriented reforms .
Bergh and Bjørnskov (2011)	Higher social trust explains the greater social welfare state and the rate of growth.
Sanandaji (2012, 2013)	Success due to free market reforms, reduction of taxes. Scandinavian nations benefit from strong working ethics compared to other European nations; culture based on Lutheran work ethics. Fast jobs recovery in Great Depression recovery due to entrepreneurship with low taxes
Moene and Wallerstein (2005, 2006)	Key innovation is institutional wage setting. “Solidaristic centralized bargaining generated egalitarian distribution of wages and salaries and equalized wages across Swedish firms and industries, creating economic efficiency and growth
Sachs (Globalist, 2012)	Openness to globalization is openness to disruption, which requires safety net for risk-sharing; wide distribution of benefits necessary for social cohesion and trust.
Dolvik, Andersen, and Vartianen (2012)	Innovations in collective bargaining agreements critical component of adjustments to economic changes
Anthonsen, Lindvall and Schmidt-Hansen (2011)	Links between unions and left party can affect responses; if unions have too great influence, they may use politics rather than bargaining to accomplish their goals, which polarizes interests
Lindville (2010)	Bargaining for reforms depends on institutional mechanisms that allow political agents to solve commitment problems, which requires central authority to control the reforms, and confidence that reforms do not undermine future bargaining strength.
Kielos (2013)	Rehn-Meidner model as macro-economic underpinning for Danish flexicurity and social democratic commitment to slashing deficits; investment in work-life balance underpinning high female participation

NordMod2030 – publications and reference group

The project's URL is <http://www.faf.no/nordmod2030/index.html>

Published and forthcoming publications

It is initially planned 13 sub-reports before the main report is to be presented at the SAMAK Congress in November 2014. The various reports are as follows:

- Sub-report 1: The Nordic models' pillars (published)
- Sub-report 2: Nordic population changes (published)
- Sub-paper 1: Nordic tax policy (published)
- Sub-report 3: Changes in external conditions (published)
- Sub-report 4: Country Study of Iceland
- Sub-report 5: Country Study of Norway (published)
- Sub-report 6: Country Study of Finland
- Sub-report 7: Country Study of Denmark
- Sub-report 8: Country Study of Sweden
- Sub-report 9: Decent work– the future of the collective agreement
- Sub-report 10: The welfare model (multiple papers)
- Sub-report 11: Inclusion and integration challenges
- Sub-report 12: Creating for sharing – Nordic innovation and industrial policy
- Sub-report 13: Democracy and participation
- Main report

The reference group

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Little Engines that Could

The Nordic countries share many common traits. Their small, open economies, generous welfare states, and highly organized labour markets have given rise to the notion of a distinct Nordic model. NordMod2030 is a Nordic research project, assigned to identify and discuss the main challenges these countries will have to cope with towards 2030. The purpose is to contribute to the knowledge basis for further development and renewal of the Nordic models. The main report from the project will be delivered in November 2014. In the meanwhile the project will publish a number of country studies and thematic, comparative reports which will be subject to discussion at a series of open seminars.



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Fafo-report 2013:22
ISBN 978-82-324-0009-6
ISSN 0801-6143
Order no. 20312