SNS ECONOMIC POLICY GROUP REPORT 2001

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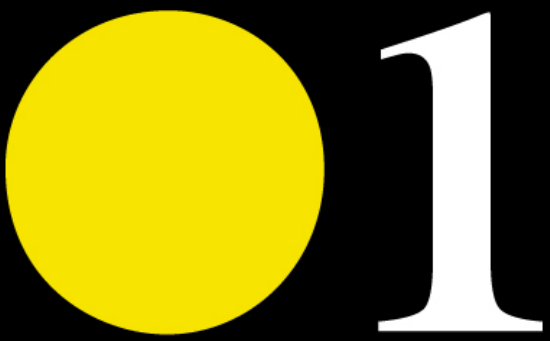
Sweden in the New Economic Geography of Europe

Conclusions and summary

Hans Tson Söderström (ed.) • Pontus Braunerhjelm
Richard Friberg • Victor Norman • Örjan Sölvell

SNS FÖRLAG



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Preface

The SNS Economic Policy Group (SNS Ekonomiråd) was established in the early 1970s by SNS – the Swedish Center for Business and Policy Studies – in response to a widespread demand for regular independent assessments of Sweden's economic situation and non-partisan evaluations of Swedish economic policy. The Group's composition varies from year to year, but it always consists of four to five economists of high academic standing. Their reports are meant to be brief, well-founded in modern economic research but non-technical in style. They are aimed at a wide readership of politicians, civil servants, business leaders, journalists, academics and students of economics.

Over the years more than thirty Swedish – and seven foreign – economists (mainly professors of economics) have served on the SNS Economic Policy Group. The reports have made a difference for Swedish economic policy. Their analysis has often formed the basis for domestic policy discussion and many specific policy proposals have (normally with a lag) been turned into actual policy. For this reason, the reports have aroused interest even outside Sweden. Summaries of some of the early reports have been translated into English, and all the reports since 1991 are available in English, either in summary form or in full.

The summary that follows outlines the analysis in this year's report and presents its main conclusions. The subject this year is Sweden's economic future in the new economic geography of Europe, which is characterised by high mobility in the factors of production and the clustering of economic activity. The report disentangles the consequences of the new environment for the Swedish economy and indicates directions for policy. It is partly based on the analysis

of a recent report from the London-based Centre for Economic Policy Research: *Integration and the Regions of Europe: How the Right Policies Can Prevent Polarization* (CEPR 2000).

Two of the authors of the CEPR report have participated in the preparation of this SNS report: Dr. *Pontus Braunerhjelm*, now executive vice-president of SNS, and Professor *Victor Norman*, Rector of the Norwegian School of Economics and Business Administration in Bergen. Further contributors to the Swedish report have been Dr. *Richard Friberg*, Stockholm School of Economics (SSE), and Professor *Örjan Sölvell*, Institute of International Business, SSE. The undersigned, who is also Adjunct Professor of macroeconomic theory and policy at the SSE, has served as chairman of the Group and editor of the report. The Group has received highly competent research and editorial assistance from *Per Thulin*, M.A., at SNS.

Financial support from the Jan Wallander and Tom Hedelius Foundation for Social Science Research is gratefully acknowledged. SNS would also like to take this opportunity to thank the CEPR for many years of fruitful research collaboration.

The SNS Economic Policy Group stands collectively behind the analysis and conclusions of the report. SNS as an organization does not take a stand on policy issues.

Stockholm, January 2001

Hans Tson Söderström
President of SNS

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Sweden in the New Economic Geography of Europe

The year 2000 concluded with signs of a slowdown in the dynamic American economy accompanied by lower growth rates in other OECD countries too, while most of the major stock exchanges around the world registered declines. Sweden is no exception: a phase of more modest growth is now expected as a result of the international slowdown and decreasing wealth effects on private consumption.

Nevertheless, the deceleration in business activity this past autumn cannot wipe out the general impression of a vigorous upturn in the Swedish economy following the problems of the crisis years in the early 1990s. In a number of respects, the positive economic trends of the last few years bear a stronger resemblance to the golden era of the 1950s and '60s than to the 1970s and '80s, when spurts of economic growth merely brought temporary relief from cost crises and fiscal imbalance. The present growth is based on a vigorous expansion of the private sector, increased entrepreneurship in new industries, fiscal discipline and a credible policy of price stabilisation.

We are now reaping the benefits of the radical reorientation of economic policy in Sweden, which initially led to major adjustment problems in the early 1990s. Today the reforms are delivering on their promise. With a norm-based stabilisation policy, a wave of deregulation and privatisation, narrowed tax wedges and scope for the Government to reduce taxes further, there is good reason to view the future with a fair degree of confidence.

The SNS Economic Policy Group has taken this opportunity to turn its attention to issues in the Swedish economy that are of more long-term relevance—though this in no way means that they are less important. These issues concern Sweden's economic future in an integrated Europe. Naturally enough, present interest in Europe focuses chiefly on the drama surrounding the future decision-making system in European politics, on timetables for enlargement and on the opportunities Sweden may have to move these questions forward during its presidency. But behind the more obvious political to and fro, no less dramatic events are in progress in European business life. Deregulation, the dismantling of trade barriers and the emergence of a pan-European capital market have created an utterly new environment for enterprises in Europe, offering an enormous potential for winning new markets, enhancing efficiency in production and developing new products and services.

The countries and regions of Europe will not be untouched by the reshaping of the European economy that is now in progress. Potentially everyone stands to gain, but the developments are not without their problems. Certain regions and countries may emerge as heavy losers, encumbered by employment problems, weak income growth and growing out-migration. The countries that risk ending up among the losers are those that fail to recognise that the rapid transformation at work in the new economic geography poses new challenges to economic policy.

These developments raise a number of questions. Which factors will determine the locations favoured by business in the new Europe? Will specialisation and a sharper division of labour in Europe inevitably lead to economic activity being concentrated in a few centres, while other regions experience depopulation? How will Sweden acquit itself in the struggle of the regions for production and employment? Will our country prove an attractive and healthy region, drawing resources and economic activity from the rest of Europe and claiming a place at the forefront of new de-

velopments? Or will Sweden turn into the "Skansen" of Europe, an economic museum for poorly paid industrial workers and antiquated structures, following the flight of entrepreneurship, ownership and development to more dynamic climes? What can economic policy do to make Sweden a winner? These are the principal issues of this year's report from the SNS Economic Policy Group.

The report is addressed to those who are responsible for economic policy in Sweden and to participants in the public policy debate. It is also intended for students of economics at universities and colleges who are seeking to get their bearings in current economic policy issues. Besides these audiences, the report is aimed at other actors in the European drama now being enacted before our very eyes: business executives, heads of public authorities, union leaders and other representatives of interest groups as well as opinion leaders on economic and social issues. It is vital for all of these players to correctly understand and evaluate the processes now under way in Sweden and our international environment, so that they can find a constructive approach that derives the greatest possible benefit from these developments. The report makes no attempt to foresee the future; it attempts rather to provide a stable ground to stand on for those whose task it is to make decisions that will have consequences far into the future.

A new economic map of Europe

European business is currently in the midst of a comprehensive process of transformation. Companies are being bought and sold, merged and broken up. New industries are being built up, others perish. New jobs are being created, old jobs are vanishing, or are moving from one region of Europe to another. Global corporate giants are in the process of formation in a range of industries including car manufacturing, energy, financial services, telecommunications and the

media. Strategic functions such as corporate management, finance and R&D are concentrating in a few European centres such as London, Brussels, Paris and Frankfurt. Highly qualified labour of every kind is being drawn to these centres with their richly diversified labour markets and generous pay packages.

The major corporate deals witnessed recently form a natural part of a continuing development that has been under way throughout the post-war era all over the developed world. Progress towards the completion of the European Union's internal market has given a new impetus to this development, which has accelerated in recent years. The economic map of Europe is being redrawn. Established players who were once able to rely on national monopolies, dominant market positions or secure ownership can no longer feel safe in a broad European restructuring of markets and production. And the pace of change can be very rapid.

Right now things are going well for Sweden. We are enjoying an astonishingly powerful economic recovery after the crisis of the 1990s, most of the curves are pointing in the right direction, and the prospect is being raised of a traditional structural conservation policy. But in the slightly longer term, Sweden's economic future will be utterly dependent on our country's ability to mesh with European—and global—structural transformation. There are certain indications that our capacity is good: examples include the IT cluster in Kista which is internationally top ranking, a strong international position in the production of popular music, and international successes for individual companies in the service sector, such as Ikea, H&M, OM and Securitas.

Other omens augur less well. Successful international corporate groups such as ABB, Astra and Ericsson are moving their head offices out of Sweden. Individuals who have achieved international success in such fields as sports, entertainment and business are also leaving the country. "Crown jewels" such as Volvo's and Saab's passenger car operations

and Aga and Pharmacia are being sold to foreign owners. Swedish ownership in the major companies on the stock market is also on the decline.

Sweden's prosperity has long built on a good—indeed, a superior—capacity for turning international specialisation and division of labour to our advantage. In the first half of the 20th century, the international success of our big manufacturing companies created new jobs in Sweden for labour leaving agriculture and forestry. But the era when manufacturing dominated employment generation came to an end in the mid-1960s and in the new services and information society, success is determined by factors that are quite different from those that paved the way for our industrial triumphs.

A few significant elements in the new pattern of development:

- For many different reasons, new entrepreneurship and growth in the small and medium-sized enterprises sector play a considerably more important role for economic development than before.
- New advances in the IT sector are changing the logic of business and the structure of the market in a way that sharpens competition, raises the pace of change and sometimes undermines the advantages held by established players.
- Deregulation, competition and the dismantling of public sector monopolies are making room for new players using new methods of production and market strategies.

These trends are paralleled by a change in the patterns of business location in Europe's new economic geography. There are two types of explanations for this change. Firstly, Europe is replacing the home country as the natural domestic market even for industries that used to be strictly regulated, such as postal services, telecommunications, transport, energy and financial services. This requires companies

—even those that already had a global reach—to create new European strategies which have consequences for the location of production, distribution and service centres.

But the new economic geography is not just about larger and more open markets. What is new in the new geography is the increased mobility of capital, skills and entrepreneurship. Large markets and to some extent cheap raw materials and inexpensive labour remain attractive magnets for production. But companies, investment *and* skilled labour are moving above all to compact and dynamic local environments that offer a highly specialised skills base, discriminating buyers and high economic activity rates in closely related and complementary industries—clusters.

The formation of clusters in the new economic geography does not primarily mean a tendency for all economic activity to conglomerate in a few densely populated regions and cities. What it is based on is that in order to maintain and upgrade competitiveness and innovational ability, companies in a given industry need to be in a local environment characterised by strong—though often informal—links between education, research, development, specialised labour, venture capital, innovative suppliers, demanding customers and stimulating competition. If we lack such environments in Sweden, there is a risk that mobile production factors may disappear from the country, even in industries where we would otherwise possess a comparative advantage.

Competition between Europe's regions is becoming harder as they strive to establish themselves as the natural centres for advanced production in a climate of growing regional specialisation and division of labour. The role that large-scale operations and industrial rationalisation played for growth and employment in the old economic geography must now be shouldered by the clusters in the new geography.

These tendencies will be the principal focus in the rest of this report, which is about Sweden's place on the new economic map of Europe. The analysis and main message of

the different chapters of the report are summarised in the following sections of this booklet. Our starting point is the current economic situation in Sweden.

The great recovery—and then what?

Developments in the Swedish economy over the last few years have been very positive. The number of people in employment has gone up by a quarter of a million since 1997, accompanied by good productivity growth. The result has been GDP growth of 3–4 per cent per year without any increase in inflationary pressures. The public spending ratio has fallen dramatically, the government budget exhibits stable surpluses and public debt meets the Maastricht criteria with some margin. The Swedish economy is also showing stable surpluses on current account.

There are a number of different factors behind the positive trend in the economy, some of which are of a temporary nature. For example, in late autumn clear indications emerged that the American economy is starting to lose its role as the engine of the world economy, with no obvious successor to play this role in sight. The euro bloc is still lagging behind and a strengthening of the euro against the dollar would scarcely help to boost European growth. It is also unclear how long the extremely brisk growth of demand in the telecom sector can continue to support economic growth in Sweden (and Finland).

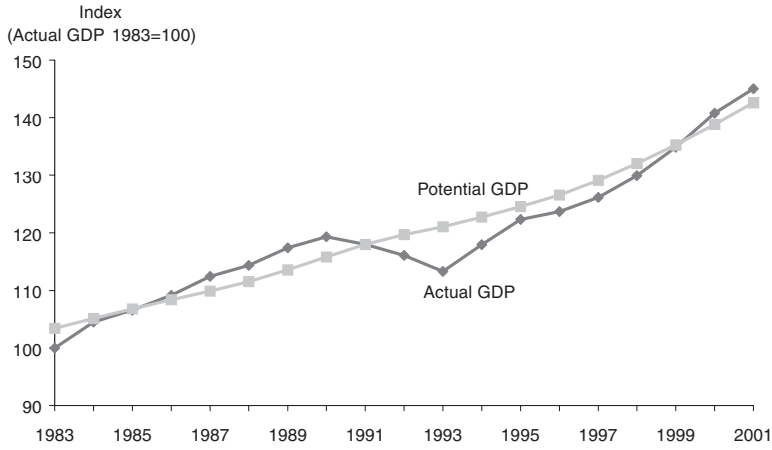
Much of the positive development in the Swedish economy can in fact be explained in terms of recovery after the deep crisis at the beginning of the 1990s. Following restructuring of private and public debt, private demand has grown rapidly, leading to increased capacity utilisation in the economy. It has proved possible to mobilise unused resources at an impressive rate. But only now have we reached a situation where supply side growth is being put to the test.

It appears possible that economic capacity may achieve

more rapid growth than in recent decades, perhaps even expanding as quickly as in the 1950s and 1960s. If this happens, the explanation is scarcely that Sweden has entered a "new economy". The real reason will be the structural reforms implemented in the 1980s and 1990s, and—not least—the reorientation of stabilisation policy towards price stability and fiscal discipline. It is important to defend these reforms—in public opinion too. Otherwise the ground on which present growth builds may rapidly erode.

There is no reason to be content with the successes achieved in recent years. Sweden has long lagged behind. Even with a growth rate a full percentage point above average growth in the rich countries, it would take Sweden 17 years to regain its former place among the ten richest. Unemployment is far from overcome: about half of it has been concealed by the adult education initiative and other political measures. Sick leave is on the rise and the actual retirement age is falling. A tax ratio among the highest in the western world has not prevented growing problems in the health services, schools and social services. And irrespective of the institutional solution we choose to the ques-

Potential and actual GDP 1983–2001 (OECD)



tion of pensions, only rapid economic growth and a higher overall savings ratio in the coming years can soften the demographic shock to the real economy that awaits us in less than a decade, when the number of pensioners will climb steeply.

On the threshold of a new economy?

It appears that the world right now is in the midst of a decisive technological leap—a digital revolution. This will affect the functioning of markets, the distribution of goods and services, the availability and pricing of information, as well as the organisation of production and our entire way of life. The notion that established economic laws more generally will be overturned is, however, mistaken and is generally based on misconceptions regarding the functioning of the economy.

In the long term, the consequences of the digital revolution may prove to be fully comparable to earlier industrial revolutions: the introduction of the steam engine in the eighteenth century and of electricity and the internal combustion engine in the nineteenth and twentieth centuries. However, studies have shown that it takes a considerable time for the full impact of new technologies to be felt in the economy in the form of increased productivity and growth. We have a long way to go before we can claim with any confidence that a new economy has taken root; so far it exists only on a limited scale. For example, at the turn of the century, Internet commerce still only accounted for about one per cent of retail sales. We cannot expect the digital revolution to have any tangible effects in the foreseeable future on economic growth, the business cycle or inflation-proneness.

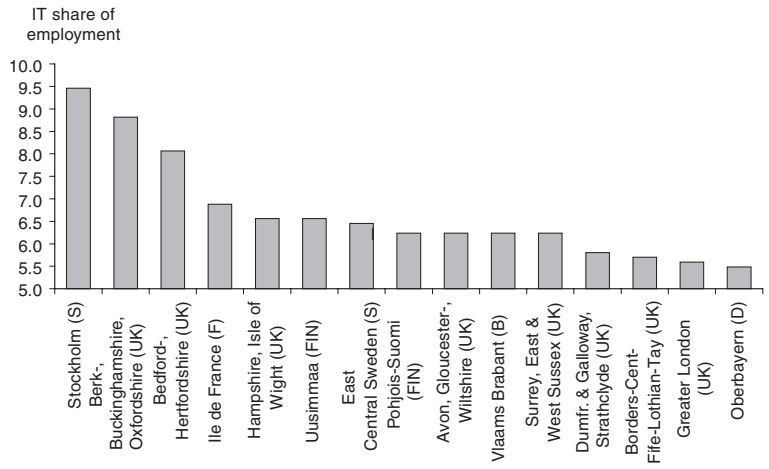
In a series of international studies, Sweden—above all the Stockholm region—has been designated a leader in IT and telecommunications. But we can by no means take our position for granted. In Kista, IT employs 30 000—in Sili-

con Valley, half a million. And there are new challengers all around the world. Even in Europe, the Stockholm region is just one of fifteen that are considered to offer especially good prospects for advanced high tech production. Outside Europe we might note Israel, with its 120 companies listed on Nasdaq, or Bangalore in India, with its 140 000 IT engineers.

So, even with a comparatively advanced position in a number of high tech areas, Swedish companies and regions are engaged in intense competition with other companies and regions for human capital, talent, venture capital and business investments. If the Swedish IT sector is to continue to grow and to retain its relatively strong international position, the institutional framework—legislation and regulation—must be adapted to fit the new economy. Policy must be based on an awareness that vital factors of production and tax bases are becoming more and more mobile and more and more sensitive to differences between countries.

Above all, competition for human capital—for brains—can be expected to intensify in future. Policy should be directed by this perspective and designed to further strengthen

IT employment in 15 high tech growth regions in Europe



and extend the relatively favourable position that Sweden has attained in IT, for example. Relative to other OECD countries, Sweden's investments in IT research in the 1990s did not increase, as one can easily be led to believe by all the descriptions of Sweden as Europe's Silicon Valley—they actually declined.

The forces shaping Europe's new economic geography

What will determine Sweden's economic future is not so much the "new economy" as the new economic geography. Deregulation and internationalisation are leading to a sharper division of labour and increasing regional specialisation in Europe. We already see signs of this process. The result need not necessarily be an increased geographical concentration of all economic activities. What we can expect, particularly in view of the American experience, is increased regional specialisation—the concentration of certain industries and activities in specific regions.

The location of future business activity in Europe will be determined by two opposing types of forces and the interplay between them. One of them consists of *forces of concentration*, which may be driven in part by traditional economies of scale but are now mainly an expression of the type of gains from agglomeration that are associated with clusters. These lead to a process of economic concentration that we can observe in the growing cities and densely populated regions of Central Europe. These cities and regions attract industries that are dependent on geographical proximity to customers, specialised labour and/or quick access to information. There are obvious examples in the USA: Hollywood, Detroit, New York, etc.

If the forces of concentration were the sole factor determining its location, all economic activity would ultimately

be concentrated in a single point. However, opposing forces counteract this tendency: *forces of dispersion*. In Europe labour is considerably less mobile than in the USA, and over the last decade mobility has even shown a tendency to decline. Natural resources like forests and ore deposits are not mobile at all. Moreover, in high density areas land rents rise and many other costs of crowding also arise. As a result, economic activity moves to the factors of production instead of vice versa. Wages and profits can still be kept up even in relatively peripheral regions by well-functioning foreign trade.

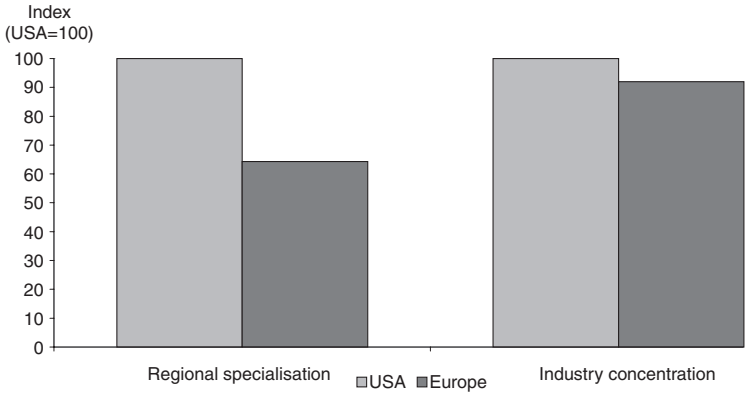
The crucial factor for future patterns of industrial location will be the relation between the mobility of factors of production and the gains from agglomeration. Depending on the outcome of the interaction between forces of concentration and forces of dispersion, there are three conceivable scenarios for the future economic geography of Europe:

- *Geographical diversity*, where trade in goods and services allows each region to make the most of its comparative advantages. A prosperous labour force can remain in its home region by participating in regional specialisation via internationally competitive regional clusters.
- *Centralisation*, where labour and business gradually move to the regions of Europe where activity is most concentrated. Mobile factors of production enjoy rich rewards in the central clusters, but they leave behind depopulated regions facing the problems typical of sparsely settled areas.
- *Polarisation*, where economic activity agglomerates in highly productive central clusters, but large portions of the labour force stay behind in the home region with poor employment rates and low wages.

Of the three scenarios, we judge the first to be the best and the third the worst. In our opinion, economic policy has a vital role to play in ensuring that the final outcome is the

geographical diversity scenario. We consider that the only way for policy to achieve this outcome is to encourage some concentration of economic activity within the country and to promote good conditions for mobility into and out of Sweden. Polarisation is a nightmare scenario for a peripheral country like Sweden: Sweden in its entirety would become a problem area, comparable to northern Sweden today. We are concerned that current policy contains certain elements that appear to be leading in that direction.

Regional specialisation and industry concentration in Europe and the USA



How large companies are changing the structure of Europe

The locational strategies chosen by large companies play a crucial role in the process of global restructuring. The world's 65 000 multinational companies, half of which are based in Europe, at present account for more than 10 per cent of global GDP. The growth exhibited by cross-border investment exceeds by far increases in international trade, global GDP and, in most countries, domestic capital for-

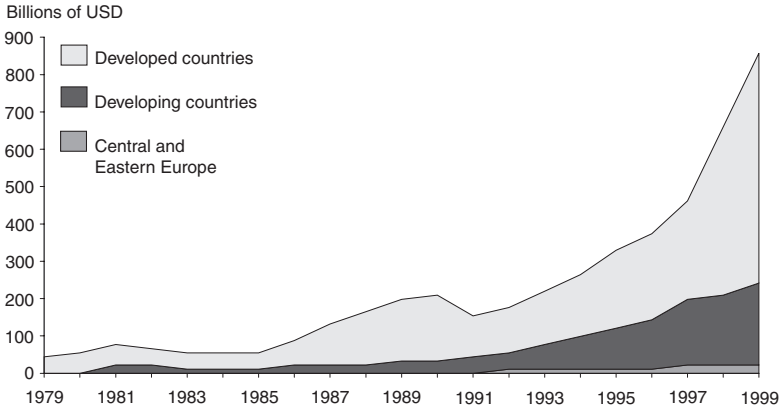
mation. Nearly 70 per cent of all international business deals concluded today consist of "mega-mergers" in excess of USD 1 billion.

Direct investments by large companies affect the demand for labour and skills, as well as the transfer of knowledge, capital formation and growth in the host countries and regions. For the investor countries, foreign investments can bring improved access to foreign markets, which has positive consequences for investments, production and exports. But they can also drain the investor countries of investments and skills to the benefit of other countries. It is therefore vital that economic policy be conducted so as to stimulate investment by both domestic and foreign companies in highly productive activities in Sweden.

Statistical analyses of Swedish multinationals, extending over a long period of time, provide indications of the crucial factors behind decisions by these companies on the location for their foreign operations. These factors include the following:

- Labour costs must not rise relative to alternative host countries that offer similar productivity levels and availability of skilled labour. In the course of the period 1974–1994, companies have become increasingly sensitive to labour cost differentials, as a result of increasingly integrated and competitive markets.
- Dynamic cluster environments and large markets exercise a powerful attraction on large companies' investments.
- Countries with low corporate tax rates and low public spending levels are more attractive than other countries.
- A high-quality education system that concentrates on producing peak competence in fields with excess demand attract production operations of large companies.
- Legislation that fosters efficient competition, prevents regional monopolies and ensures international openness has a positive effect on direct investment.

Global direct investment flows 1979–1999



We can influence many of these areas ourselves, which means that economic policy plays a vital role for Sweden's capacity to become one of the winners in the restructuring of the European economy. A country does not need to top the rankings in every respect, but its economic policy must be benchmarked relative to other countries.

In Sweden, economic policy has long focused on keeping relative labour costs down. Wage negotiations are characterised by calls for moderation and devaluations have been undertaken when Sweden's international competitiveness has weakened. However, as the above analysis indicates, in the longer run a relatively high level of wages can be counterbalanced by other conditions that economic policy is in a position to influence, e.g. strong clusters, high skills levels or low tax rates. In our opinion, economic policy should make a greater effort than before to create such structural conditions, which allow a relatively high wage level.

Cluster dynamics—local environments that foster success are essential

The existence of strong clusters is an important—perhaps a crucial—competitive advantage in the new economic geography of Europe. Tendencies towards cluster formation have long been in evidence in relatively traditional industries, e.g. car manufacture in Detroit and southern Germany, pulp and paper in parts of Sweden and Finland, clothes and shoes in northern Italy.

In earlier times, natural factors such as climate, raw materials and ports played an important role in the location of industries. Moreover, access to specialised skills and advanced markets has probably been decisive for the pattern of concentration seen in certain service industries, such as financial services in London and on Wall Street, fashion in Paris, auction houses in London and publicity firms on Madison Avenue.

Deregulation and internationalisation give freer scope to the forces of concentration in today's high tech industries. More and more related activities are agglomerating in geographically distinct, "compact" environments, just as the film industry long ago concentrated in Hollywood and IT more recently in Silicon Valley. Stockholm has attained a leading position in wireless communication and the Internet. Links to historically established Hollywood-type environments are important for the emergence of new companies, while sources of new expertise from universities, colleges and research institutes, among others, are often crucial factors behind locational decisions.

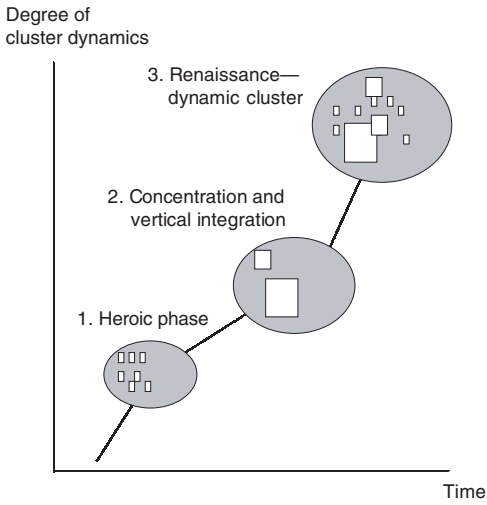
The local production environments—clusters—that harbour the industries of the future are not characterised chiefly by advantages of scale but rather above all by a capacity for perpetual innovation and upgrading of goods and services, and a continued specialisation and upgrading of human capital. To put it in slightly exaggerated terms, one can argue that it is production that creates the factors of production.

Cluster dynamics build on:

- stimulating competition and rivalry between companies in the local environment;
- new entry in the form of new businesses and spin-off companies;
- continuous development of increasingly specialised input goods and services;
- proximity to demanding customers;
- links to technologically related industries.

Over and above these conditions *within* the local environment, free and substantial mobility between the cluster and the rest of the world is vitally important if the local environment is to avoid stagnation. To achieve vitality in the long term, clusters need to be able to attract companies, venture capital and international leaders with relevant skills from all over the world.

Stages in the growth of a cluster



Exactly where Hollywood-type environments arise depends on many factors, including pure chance. One necessary condition, however, is a good breeding ground for entrepreneurship and continued growth. At present, Stockholm—particularly the areas around Kista and Stureplan/Hötorget—exhibits marked Hollywood tendencies in the IT field. Here we perceive a dynamic cluster characterised by new enterprises, venture capital, IT education, unique research and market knowledge in the areas of wireless communication and the Internet.

The present IT cluster has deep historical roots in earlier Swedish developments in the fields, first, of fixed telephony and then, later, mobile telephone systems. Following an initial "heroic" phase, fixed and mobile telephony have undergone a period of consolidation and have then in more recent years developed into a dynamic cluster. The Internet is still in its "heroic" phase, but there are some indications that it may be entering a period of consolidation. What may be the most important element of cluster dynamics today is the stiffening competition based on flexible yet neutral regulation and entrepreneurship arising from spin-offs and venture capital. A quite new—cocky and "American"—entrepreneurial culture has spread from the Stenbeck camp to pervade such areas as mobile telephone systems, fixed telephony, the Internet and media.

Sweden—more than just Stockholm

The Swedish cluster dynamics of the past few years have largely been concentrated in the Stockholm region, which has been designated one of Europe's most attractive regions for IT activities. In more general terms, the increasing geographical concentration of economic activity in Sweden is related to the growing share of employment in private services. As a consequence natural conditions, raw materials and other geographical circumstances have lost much of

their significance as a counterbalance to concentration, as has the public sector. This is reflected in the pattern of migration to metropolitan areas in Sweden in recent years; the major cities are the only parts of the country that have experienced population growth.

These developments are not necessarily negative. On the contrary, a recent government commission on regional policy showed that mobility is largely voluntary and is associated with substantial welfare gains for those who move, in general the young. In point of fact, concentration in the major cities and university towns is what enables a sparsely populated country like Sweden to generate cluster dynamics in the knowledge-intensive industries of the future. There is a risk in pursuing policies that spread resources too thinly over Sweden. The result may be that the critical mass required for dynamic development will fail to arise anywhere in the country. Too great an ambition to achieve "regional balance" *within* Sweden may in the worst case help to bring about a polarisation of Sweden as a whole relative to more dynamic and densely populated regions of Europe.

We would like to emphasise, however, that Sweden has the potential to generate dynamic clusters outside the Greater Stockholm area. As we see it, at least half a dozen geographically distinct local environments in Sweden should be capable of competing successfully on the European stage, provided they find their own specific niches in the world market and are given the right conditions to develop. It would be counterproductive to attempt to identify in advance the industries, towns or regions that have the best prospects. Clusters arise spontaneously as a result of—often unexpected—changes in demand or technology. Some of the factors that are crucial to the emergence of vigorous clusters are local initiatives, a perceptive and responsive attitude on the part of universities and colleges to the skills demanded locally, and good communications both between and within regions.

Population growth 1991–1999, by regions

Region	Population 1999	Accumulated share, percent	Average annual change, percent	
			1991–1995	1995–1999
Stockholm	1 869 785	21.1	1.0	1.0
Göteborg	895 666	31.2	1.0	0.6
Malmö	630 663	38.3	1.1	0.6
University regions	1 492 306	55.2	0.9	0.0
Regional centers	2 265 383	80.7	0.3	– 0.4
Secondary centers	908 550	91.0	0.1	– 0.6
Small reg. (priv. empl.)	350 913	94.9	– 0.5	– 1.2
Small reg. (publ. empl.)	448 160	100.0	– 0.3	– 1.1
Sweden	8 861 426	100.0	0.6	0.1

To ensure that all parts of Sweden—major cities, university towns, regional centres, rural areas—have the best possible conditions for economic development, it is vital that the forces of dispersion are given the chance to exercise their effect to the full. Efficient labour and housing markets are fundamental requirements for good regional development. High wages and rents are necessary ingredients if dynamic clusters are to be able to attract competent labour and construction. Conversely, lower costs for labour, housing and non-residential premises must be allowed to constitute vital competitive advantages for regions outside the clusters.

Any policy that attempts to prevent such differences promotes centralisation and—if worst comes to worst—polarisation. A compressed wage structure and an effort to keep commercial rents and housing costs at the same level throughout the country have a doubly negative impact on regional development. Firstly, they prevent dynamic clusters from growing in our own country, which is likely to mean that advanced economic activity will move to competing clusters outside the country. Secondly, they prevent the regions outside clusters from competing by means of lower costs for production and housing.

Corporate strategies for success in the new economic geography

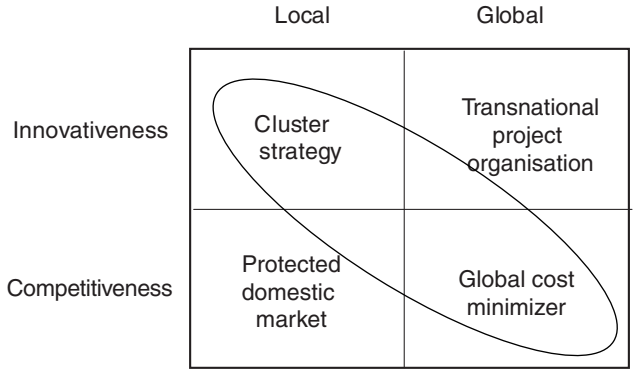
Our analysis provides indications of the corporate strategies that have the best prospects of success in the new international environment. Our line of reasoning builds on Michael E. Porter's analysis and centres on two pairs of concepts: firstly, "globalisation" versus "localisation", to describe the forces at work in the environment in which companies operate, and secondly, "innovativeness" versus "competitiveness" to characterise the means chosen by companies for building long-term competitive advantages.

Traditionally, major Swedish industrial companies have been very successful in achieving a high level of competitiveness in global markets. By skilfully marketing their products across internationally important markets, these companies have been able to exploit advantages of scale in production on the domestic scene, thereby establishing a competitive advantage composed of both global presence and high cost-effectiveness. Gradually, they have managed to achieve further gains in cost-effectiveness by establishing production units in the vicinity of large markets or in countries where conditions for particular types of production are better.

This strategy of globalisation has enabled large companies to maintain their cost-effectiveness by concentrating different production lines in different countries and from there selling worldwide. This has enabled them to take full advantage of increasing returns to scale. The local element has mainly been a result of protectionism. In certain cases—particularly in cases of public procurement—local producers are given preferential treatment. In such cases the strategy has been "multi-domestic": the company in question has declared that it has more than one "domestic market". Yet it has still been possible to maintain cost-effectiveness by exploiting various forms of "outsourcing" and global scale in core products and systems.

Over a longer time horizon, however, cost-effectiveness is not enough to guarantee long-term profitability and survival in the market. Long-term competitive advantage is based primarily on "innovativeness", i.e. the capacity to provide customers satisfaction by innovative and continuous upgrading of the knowledge content of products and of marketing, production, logistics, organisation, etc. Transnational strategies have proved problematic in this context. Innovation projects involving global teams have often turned out to be miscalculations as a result of high costs and major delays.

Four strategy types in the new economic geography



The strategy for success where large companies are concerned is therefore to ensure innovativeness by building up insider positions in one or more leading local clusters and to ensure competitiveness by means of a global strategy for current production and marketing. To secure a world-class flow of innovation, it is in the company's own interest to promote the local cluster environment by cooperating with institutions of higher education, cultural institutions, etc. In addition, companies will need some form of presence ("monitoring") also in clusters where they lack insider positions.

In time, the cluster-based units that supply the companies with innovativeness inevitably come to occupy an increasingly independent position in the group. It is doubtful whether the head office is able to control such subsidiaries at all in the true sense of the word. Successful large companies consequently come to have an increasingly federal structure in which the functions of the Group headquarters become mainly a matter of providing service and coordination.

Economic policy in the new economic geography

Sweden's economic success in recent years generates concern about the long-term orientation of economic policy. The success has been based on a radical and determined reorientation of both stabilisation policy and structural policy. In stabilisation policy, we have seen the abandoning of Keynesian "fine tuning" ambitions and short-term measures to shore up employment, in favour of a norm-based policy of price stabilisation and fiscal stability. In structural policy, interventionism guided by industrial, regional and distributional considerations has been abandoned in favour of deregulation, competition and privatisation.

Although the reorientation of policy is still not complete, it has nonetheless yielded extraordinarily positive results in recent years. Growth has been strong, inflation low, employment is rising and a new entrepreneurial attitude is growing up among young people in the labour market. There should be good prospects for tackling the problem of widening income differentials in a constructive manner, by means of education, training and increased mobility. Yet the reasons for our economic success are more or less ignored and the political debate is mainly concerned with staking out claims in—and redistributing—increased future resources that seem to be taken for granted.

Our economic prosperity is in greater danger than is apparently realised in the public discussion. It is threatened by a lack of popular support for the economic policy U-turn that has returned prosperity and growth to a faltering economy. It is threatened by deficiencies in the implementation and follow-up of the economic policy reforms that have been initiated. It is threatened by the changing demands on the economy resulting from a digital revolution, which will require very rapid structural transformation in the future. It is threatened—not least—by the processes shaping the new economic geography of Europe. It is the last of these prospective threats that has been the starting point for this report, and we will conclude this summary by presenting the conclusions for economic policy that can be drawn from the analysis in this report.

Traditionally, Swedish economic policy has been successful in exploiting the potential for economic success enjoyed by a small country, via specialisation and participation in the international division of labour. Policy has been orientated towards free trade and structural transformation. These remain necessary conditions for economic success. But in the new economic geography they are no longer sufficient conditions.

The new element in the new economic geography is the mobility of production factors. Today, enterprise and venture capital—and hence also employment—seek compact, dynamic local environments characterised by a highly specialised skills base, discriminating buyers and high levels of activity in closely related and complementary industries—clusters. If we lack environments of this kind in Sweden, there is a risk that mobile factors of production will disappear from our country even in industries that would otherwise enjoy a comparative advantage.

A successful economic policy in the new economic geography must therefore be characterised by "split vision": one eye on the capacity to participate successfully in the international division of labour and specialisation, and one

eye on the ability to build up domestic local environments that are highly attractive to internationally mobile production factors such as venture capital, specialised skills and entrepreneurship. Just as we have long accepted in the context of trade that we export certain goods and services and import others, we have to accept that in the new economic geography certain entrepreneurs and specialists will leave the country while conversely, we attract competence and capital in other areas from all around the world.

A first indispensable condition if Sweden is to stand out as an attractive country for advanced production and development is a *stable macroeconomic environment*. We want therefore to underline the importance, firstly, of continuity in inflation targeting by a central bank that remains independent of party politics, and secondly, of fiscal discipline including a rigorous ceiling on public spending and an ambitious budget surplus target. These norms must command absolute respect in the political process, otherwise there is a risk of a relapse into a stabilisation policy mire with incalculable consequences for welfare and growth.

Nevertheless, there ought still to be scope for continued tax cuts. These are important in the new economic environment, in which domestic employment is becoming more and more dependent on new businesses and small business growth. To give these businesses reasonable conditions for development, changes are required in the taxation of capital and corporate tax rates, including the taxation of options and profit shares and the tax regulations governing close companies. As pointed out in the 1999 report of the SNS Economic Policy Group, present tax regulations have the absurd consequence that purely financial investments in Sweden are taxed at a considerably lower rate than investments in a company of both capital and skills. As a result, many new companies are now incorporated abroad, primarily in Holland but also in Denmark and in pure "tax havens" such as the Cayman Islands.

The total tax ratio must be in line with the ratio in other

advanced industrialised countries. We would like to stress in particular the importance of "benchmarking" in the area of taxation. Tax rules that bring about neutrality and uniformity relative to other parts of the Swedish tax system can still have disastrous effects on entrepreneurship, the propensity for innovation and investment if they seem unfavourable by international standards. Entrepreneurs and highly skilled employees are key factors for future growth, but today they are also production factors that display a high degree of international mobility. Tax rates that diverge widely from those of other countries will therefore mean that the treasury will lose tax revenues because competence and ownership move abroad. If Sweden is to attract individuals whose skills are in international demand and avoid "brain drain", taxation must be on a level with the rest of the world. This issue cannot be solved by a special "expert tax" that applies only to foreigners.

The tax issue is also crucial for the other component of a "split vision" economic policy: to strengthen Sweden's capacity to build internationally attractive dynamic clusters in this country. Over and above international tax benchmarking and generally good conditions for entrepreneurship, there are a number of other conditions that ought to be fulfilled to enable local environments of this kind in Sweden to strengthen their competitive position.

The first of these conditions is an *education and research* system that maintains high international standards, with good links between business and higher education in the specific areas where the clusters are active. It should be possible to adapt the local orientation of institutions of higher education to the specific business focus of the cluster, and the manner in which these institutions are organised should encourage a flow of ideas and individuals between companies and higher education. However, let us issue two warnings: it must not be believed that institutions of higher education can create clusters, nor must the resources available to higher education be spread too thinly. A critical

mass is required to achieve internationally competitive research.

A second condition is a *local infrastructure* that supports the development of the cluster. This involves access to commercial premises, housing supply and good communications within the cluster and between the cluster and the surrounding world. It must be possible to travel from an internationally competitive cluster to the most important European centres in a few hours (and preferably to return the same day). Where this infrastructure is concerned, we do not believe in central government planning but in healthy competition between Swedish towns and regions, based on local tax revenues.

In other respects too, it should be possible to augment the capacity of Swedish clusters to attract top international talent in relevant areas. This may involve, for example, a differentiated local *labour market* that provides interesting employment opportunities for the family's secondary wage earner and good *schools* for the children. Sweden would also be able to make itself more attractive by becoming officially *bilingual*, in the sense of allowing contacts with public authorities and other essential communication to take place in both Swedish and English.

Good economic development thus presupposes cluster formations, and clusters presuppose a critical mass. This raises the issue of the future regional balance in Sweden and Swedish regional policy. Here we wish to warn against the vision of a Swedish "pancake", with economic activity spread evenly over the country. If a critical mass is not attained in any single location in Sweden, advanced production will grow outside rather than inside Sweden. This is why we believe in the vision of a Sweden with "spots" of high economic activity well dispersed across the country. Our country should offer the potential for at least half a dozen geographically distinct clusters of international stature.

If problems in sparsely populated areas outside the inter-

nationally strong Swedish clusters are not to become too severe, it is essential that the forces of concentration are balanced by powerful forces of dispersion. These consist above all of price formation in efficient markets. Labour, commercial premises and housing must be cheaper outside the clusters. Only so can secondary regions attract economic activity that does not necessarily need to be at the heart of the clusters in order to be productive. To give all Sweden's regions reasonable economic prospects in the new economic geography, significant changes are therefore required in such areas as wage formation and housing policy.

In conclusion, Sweden stands at the crossroads in the new economic geography. If we choose the wrong policy, today's positive economic trend may turn out to be just a passing flare in the darkness of winter. If we choose the right policy, our land may be heading for a brilliant future with vigorous, internationally attractive clusters in a number of industries that have strong prospects for the future. This is what we mean by the vision of *kluster.se*.