

ABOLISHING UNEMPLOYMENT

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Preface

The employment problem can be solved. That is the main message in *Abolishing Unemployment*. Much of the public discussions on the employment problem is conducted in terms like "we have to learn to live with unemployment", as if it were a law of nature. This is a very dangerous attitude – in the end it might even tear apart the web of confidence and mutual trust, on which democracy and the civilised society depend. It provides soil for the prelates of "historical indispensability", the emergence of whom indicates social disaster.

The economy is not governed by natural laws. Unemployment can be diminished by the proper use of the economic policy instruments that are presently available, the very same instruments that are used to force the sky-high unemployment of today. Unemployment or full employment is a matter of political choices, about the choice between a good society with work, welfare and human dignity for all, and a society with mass unemployment, social disarmament, masters and servants.

The key to the solution of the employment problem is a new economic policy, one that can be implemented without extensive reform of our social institutions and our economic system. To bring about this change, a revolution is needed. But not an upheaval of our system of government, but a revolution of mind. The limits to what we can achieve are not seldom set by our mental barriers, by our *notions* of what can or cannot be done. If we think it is impossible to abolish unemployment, then unemployment will certainly persist.

But our notions are not always correct. Once the earth was not only flat but also the centre of the universe. In the minds of people, that is. When reality finally came thronging in, people changed their minds. Matters stand similarly with the economic dogmas underlying the economic policy of today. According to these theories, there is a "natural" rate of unemployment, which cannot be surpassed, unless inflation runs amok, causing the whole economy to break down in the end. If this belief is spread widely, and economic policy is shaped thereafter, no wonder why hordes of people are forced to stay unemployed year after year.

But Rejoice, Thou Incredulous! There is no "natural" rate of unemployment. The train of thought which brought us into mass unemployment ran the wrong way. Unemployment can be abolished without skies falling down on us. The question is not *whether* it is possible, but *how* it can be done. That question will be answered within these covers. In that way, the book is really food for thought, a source of rethinking and reconsideration of the employment issue. Hopefully, it may contribute to form the new view of our economic life which is needed to get rid of unemployment.

To clarify how unemployment can be abolished, an economic theory must be formulated. Economic theories are usually somewhat hard to digest, not least to the layman, who is not familiar with the terminology and the jargon usually sported in economic contexts. Often this is merely a matter of lingual snobbism, which is wholly unnecessary. Sometimes, however, specialised concepts must be used to reach the desired degree of precision in usage and analysis. In order to make my presentation accessible to the widest possible readership, I have endeavoured to explain all concepts and terms which may not reasonably be expected to be part of the vocabulary of the well-read.

A theory is not much worth if it is not tested against reality. Much of this book will be dedicated to the inquiry into whether the development of the Swedish economy can be properly explained by the theoretical scheme. Beneath the empirical testing lies a fairly large amount of statistical work. Here is only accounted for the tip of this iceberg. Many details could and should have been discussed in far greater detail than what the size of this book has allowed.

The inquiry would not have reached nearly the same quality, had it not been for Lennart Berg at the Economics Department, Uppsala University, and Olof Bäckman at the Swedish

Institute for Social Research, Stockholm University. They have generously shared with me their time, their statistical data sources and their rich knowledge and proficiency in economic theory and statistical techniques, respectively. I am deeply indebted to both of them.

The writing of this book has required quite deep-going studies in the theory of national accounting. In my strife to understand everything, I have subjected the staff of the National Accounts department of Statistics Sweden – Michael Wolf, Jörgen Enmark and Hans Svensson in particular – to a cascade of exacting queries, which they have helped me sort out with the patience of an angel.

Leif Ericsson at Ordfront has prompted the project by hook or by crook. Without his help the book would surely not have come about.

Thanks also to my dear friends and sparring partners Sven Robert Larsson, Torsten Sverenius and Jesper Jespersen, who kept my fire burning with the peculiar blend of analytical acumen, social commitment and striking humour that can only be found in real Keynesians.

Finally, let me express my heartfelt gratitude to my family, without the support of which I would hardly have been able to stay upright during the many and long working weeks, not seldom filled by set-backs and difficulties.

Per Gunnar Berglund

1. The employment problem

Unemployment is a *symptom* of an underlying disease – the employment problem. There is little use trying to cure the symptoms without going into the underlying causes. If you force the unemployed to take jobs they do not want, jobs that are unhealthy, with few prospects, underpaid or at a lower qualification level than the skills of the unemployed – well, then you tackle the symptoms but not the cause. Real under-employment endures, while the general welfare level is not likely to rise. All that happens is that the official figures of unemployment are cooked in order to make the employment situation look better than it really is.

Such an "employment policy" is sweeping the unemployment problems under the carpet instead of solving them. In this book we will show how the unemployment problem can be *solved* instead of *hidden*. Therefore very little will be said about measures that actually have been taken against unemployment and all the suggestions that have gained credence in the public discussions on how unemployment ought to be reduced.

Relief employment, shorter hours, increased wage flexibility, lowered unemployment benefits, "softened" labour legislation, job sharing, a "free year" during your working life – all these measures and suggestions which dominate the employment policy thinking of today, have a common denominator; the unemployment problem *cannot be solved* as such. All we can do is to share the employment that already exists in one way or another. With any luck a little more employment may be squeezed out of the economic system, but only at the cost of increased insecurity and inequality.

None of these strategies leads to any real improvement of the employment situation. For this reason we will leave these measures out of consideration. That is not to say that the strategies are worthless as such. We should definitely pursue an active labour-market policy. The normal number of working-hours ought to be reduced gradually. There are elements in the ideas of increased wage flexibility and smoother labour legislation that are reasonable. Ideas of job splitting and "free years" are in many respects praiseworthy. *But these strategies do not solve the employment problem.*

The discussion of working-hours, activities initiated by the Labour Market Board, the system of wage formation etc., are not really focusing on the employment problem. The employment problem is simply about something else, namely the balance between our *ability* to work and how much we *actually* do work, the relation between *potential employment* and *actual employment*. This "relation" can be formalised as a mathematical quotient, defining *the rate of employment*.

$$\text{The rate of employment} = \frac{\text{Actual employment}}{\text{Potential employment}}$$

The higher the rate of employment, the less acute is the employment problem. Thus, solving the employment problem is an issue of raising the value of the quotient to a sufficiently high level. What exactly should be meant by "sufficiently" can, of course, be a matter of discussions. The ambitions can be set on different levels. A suitable procedure would be to study how the rate of employment has varied over time, and to set the target in parity to prior achievements.

Thus, in the fundamental equation of the employment problem we have three unknowns: actual and potential employment, and the rate of employment. In the following two chapters we shall thoroughly discuss the definition and measurement of these magnitudes. With the aid of these methods, we shall measure and compute the extent of the employment problem in Sweden during the period 1963–1993.

The categorisation into actual and potential employment make possible a detailed analysis of the *causes* of the employment problem, apart from the computation of its extent.

In chapter three we shall demonstrate that the potential volume of employment increases spontaneously in the civilised society, at a rate consistent with the gradual increase of our knowledge and skills. The size of the potential employment is essentially given at any point in time. Therefore, the solution of the employment problem must lie in the sustained increase of the actual employment at a rate exceeding the spontaneous growth of the employment potential.

In chapters four and five we will show why the actual employment depends on the aggregate *demand* for economic activities, and how the demand may be regulated by the use of already existing economic policy instruments.

Thus we also investigate the relations between economic policy measures and the employment of the Swedish economy. On the basis of this investigation, we may draw conclusions about which strategies are appropriate to solve the employment problem.

But there is more to it: Apart from our telling what kind of measures are needed, we can also, roughly, show *how much* expansion that will be needed.

In chapter six, we sketch an expansionary scenario, where the employment problem is solved in a ten-year period.

2. Measuring employment

All production is based on human labour. Defining "employment" is tantamount to defining what "production" is about. In the official UN *System of National Accounts (SNA)*, the main principle is that all *paid* activities are regarded as productive as opposed to unpaid work.¹

A much debated consequence of this principle is that unpaid household work does not count as "production". Accordingly, housewives are not "employed" in the statistics of today, no matter how hard their daily toil.

Once a production boundary has been defined, it is in principle possible to judge how many persons are employed. The measurement of this number involves a host of complications of a purely technical nature: Is the whole population to be surveyed or just a sample? If the latter, how do we infer from the sample to the population?, etc. But if we disregard the sources of error in the measuring methods, an exact figure should present itself once a sharp production boundary has been drawn.

The development of the number of persons employed, according to the *SNA* definition, is shown by diagram 2.1. During the entire period 1963–1990, the number of employed increased steadily, from approximately 3.7 million in 1963 to nearly 4.6 million in 1990. After that, the number of employed fell dramatically, with half a million persons in only three years. In 1993, the number of employed had decreased to the level of 1974! According to this diagram, the catastrophic slide of the 1990's constituted a genuine break of trend. Several decades of uninterrupted employment expansion changed to its radical contrast in the first years of the 1990's.

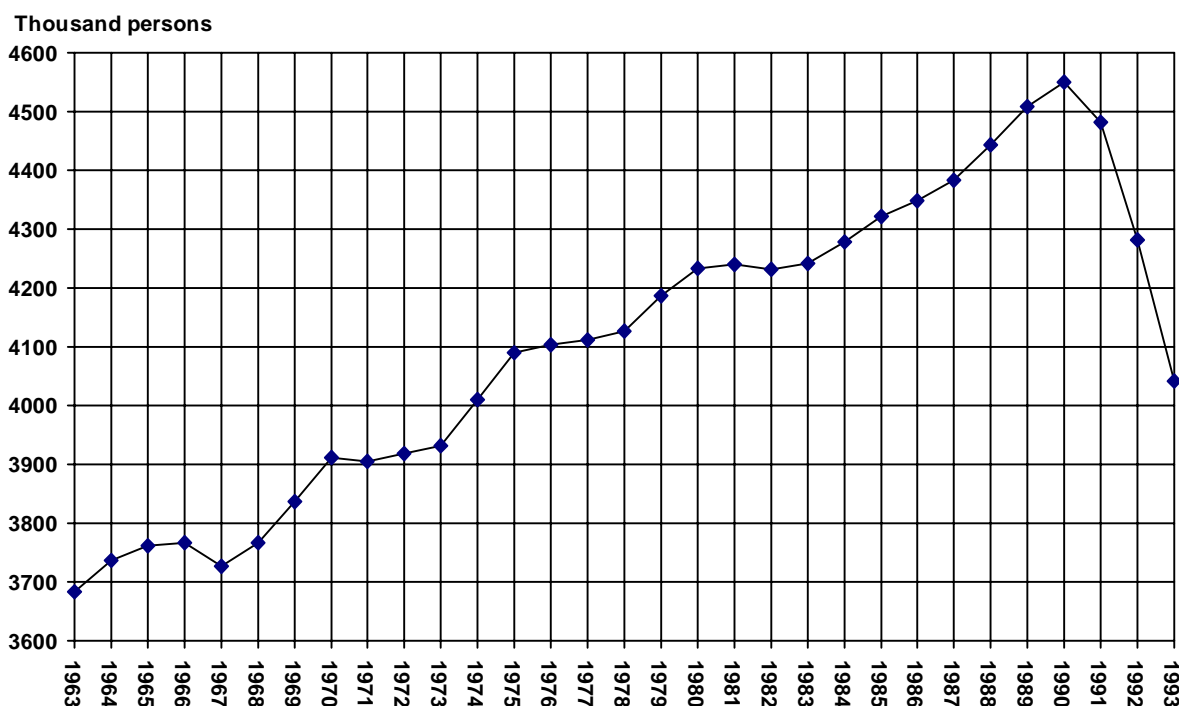


Diagram 1. The number of persons employed 1963–1993. Source: Statistics Sweden, National Accounts.

¹ There are many exceptions, in particular in the agricultural sector, where a wage is imputed to certain unpaid labour. These exceptions are however of little quantitative significance in the modern economy.

It is no doubt very important and interesting to know how many persons are employed. But those figures still say rather little about the quantity of work performed. One way of making the employment measure more precise is to count the number of working hours. In that way we adjust for variations in the average number of yearly working hours per person employed.

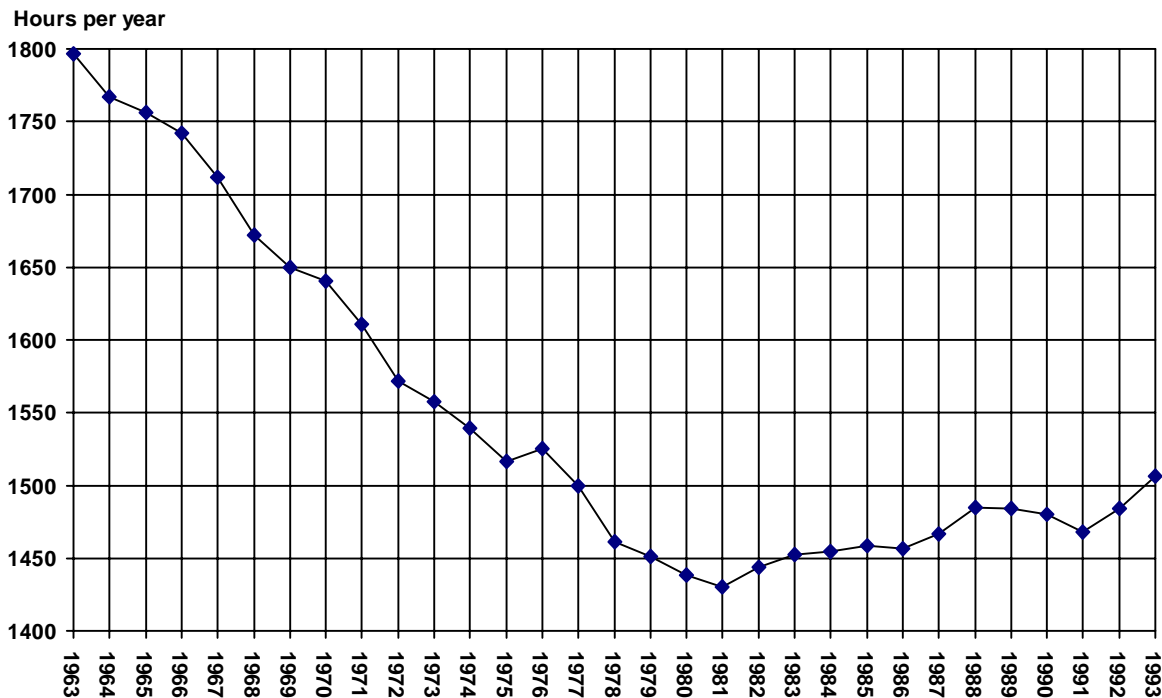


Diagram 2.2. Average number of working hours per employed 1963–1993. Source: Statistics Sweden, National Accounts, and own calculations.

As is shown by diagram 2.2, that adjustment is highly justified. The yearly working hours fell dramatically during the entire 1960's and 1970's. The lowest value was reached in 1981, after which the trend has been mildly increasing. During the 1980's and the 1990's, the employed have tended to work more and more hours per year. We shall pursue no closer examination of the reasons behind the changes in the yearly working hours. But they are noteworthy for the simple reason that they lie behind the distortion of the picture of the employment development when we pass from counting working heads to counting working hours.

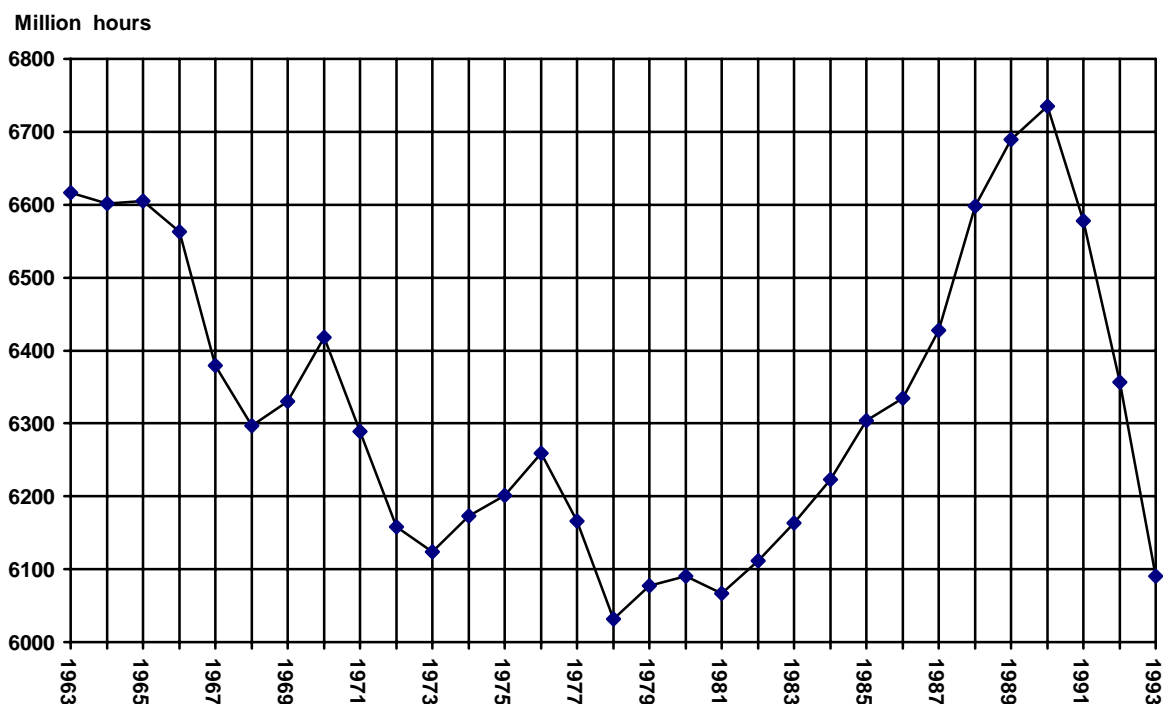


Diagram 2.3. Number of working hours 1963–1993. Source: Statistics Sweden, National Accounts.

While the number of employed increases uninterruptedly up to 1990, the number of working hours follows completely different paths, which is clearly seen in diagram 2.3.

During the "record years" up to 1965, the number of working hours were on a high and stable level. The business downturn in 1966–68 resulted in a veritable slide in the number of working hours. The powerful upturn of 1969–70 only brought about a modest increase in the number of hours worked. The downturn which followed the "lost years" of 1971–1973 produced a far more pronounced result in the number of working hours. In 1973, a record low was reached at just above 6.1 billion hours performed, nearly half a billion hours less than during the "record years" of the 1960's.

The business cycle pattern after 1965 was repeated during the upswing of the "bridging years" 1974–1976, and the ensuing downturn in 1977–1978. During the upswings, the number of working hours increase slightly, just to fall dramatically in the recession. The absolute trough was reached in 1978, when the number of hours had sunk to slightly over 6 billion.

It is not difficult to discern a clear down-going trend for the entire period 1966–1978, periodically interrupted by tiny upswings during the booms. This regularity breaks down during the period 1979–1981, when the number of working hours is comparatively stable. After that, an uninterrupted and very large increase follows during the whole period 1982–1990. The increase is so powerful that the number of working hours reaches an absolute record level both in 1989 and in 1990. In the peak year of 1990, over 6.7 billion hours were performed, which is an increase by nearly 700 million hours (about 10 percent) in less than a decade.

If the increase of the 1980's appears dramatic, the decrease of the 1990's is appalling. About 600 million hours of employment vanished in the three years of 1991–1993. Almost the whole of the increase of the 1980's was cancelled in the depression, which brought the number of working hours back to the level prevailing during the later half of the 1970's, when we worked the least – as counted in hours.

A comparison of the figures 2.1 and 2.3 shows that the very definition of the concept of employment – whether we count heads or hours – implies radically different pictures of the

employment development. The correlation between the two time series is practically non-existent.

If the time series of the two diagrams are broken down into parts, it is possible to obtain high correlations, in particular for the period 1982–1993. This is so because the two employment measures change in the same direction each of the years 1982–1993. But the eye, in contrast to the statistical correlation coefficients, reveals that it would be rash to haste to conclusions from this co-variation. From a historical perspective, the changes during 1982–1993 are considerably more dramatic in the number of working hours than in the number of persons employed. Still we find that the number of employed diminishes much more than the number of working hours during 1991–1993. The number of working hours recede to the level of the early 1980's, while the number of employed falls back far beyond the level the early 1980's.

No matter how the matter is twisted and turned, one still finds nothing but paradoxes and exemptions when seeking stable relations between the two employment measures. There simply seems to be no sensible formula by which the two different time series can be forged to display the same thing – employment in the wide sense. The moral of this is that the choice of employment measure is plays a crucial role in the emergence of the picture of the employment development. Therefore we must choose the *right* employment measure – arbitrarily picking one out of the heap will not do. The results of the analysis may be totally misleading if we use an irrelevant definition of the concept of employment.

But how do we choose rightly? The main principle must be that the measure should be as comprehensive as possible, within the limits set by the *SNA* production boundary. If a measure may be factored into another measure, the former measure covers the latter. For this reason, the former measure is preferable. For instance, take the two employment measures discussed above: The number of working hours may easily be factored into the number of persons employed and the average number of yearly working hours per employed, according to the equation

$$\begin{aligned} \text{Number of working hours} &= \\ &= \text{Number of people employed} \times \text{Average number of yearly working hours per employed} \end{aligned}$$

The number of working hours contains, or "encapsulates", the number of employed. Therefore, the number of working hours is the more comprehensive measure of employment. If we know how many hours have been laboured in the aggregate, the number employed only contributes (and very incompletely) to show how the working hours are *distributed* across the population. The number of employed *adds* no information on the total quantity of labour performed.

The shortcomings of counting the number of employed are obvious: The length of the yearly working time of the employed is not considered. This shortcoming may be mended by counting the aggregate number of working hours. But counting hours also has its limitations, if less obvious: No regard is paid to *what people are working with* during the hours of employment.

Counting hours means that the working-hours of nurses, doctors, warders and lawyers are simply added up. No adjustments are made for the different *value added* by these different kinds of occupations. According to the standard theory of value, adding up a mixture of apples and pears is not permissible. Only the summing of equivalent units is allowed.

In economic coherence "equivalent" means the *same price* per unit. Thus: if the nurse and the doctor had the same hourly wages, then these occupations would be equivalent. This would make possible the direct summing of their working hours. Since their wages are different in reality, the working hours must be *weighted* by their respective *relative wages*. Let us say that the doctor has twice the hourly wages of the nurse. In that case one doctor's working hour corresponds to two nurse's working hours.

This principle may of course be discussed from an ethical point of view. But the *economic* theory of value does not devote much effort to the question of which prices *ought* to be set on the one or the other service. Instead, it presumes the priorities *actually* done in society. In our society it is a fact that doctors are valued higher – economically speaking – than nurses. One may decry this. But the task of the national accounts is not to approve or reject the present priorities of society, but to record the just the way they are. Of course, that implies that every future change in society’s valuations of different kinds of services will lead to corresponding changes in the value computations.

This weighted summation of different kinds of working hours – the doctor’s and the nurse’s, respectively – yields a volume index number for employment as a whole. We shall call this index number *the volume of employment*.² When the volume of employment is computed, the working hours are adjusted in two respects; (1) the wage relations between different kinds of jobs performed during the same year, and (2) changes in the composition of aggregate employment through the years.

If the number of highly qualified and knowledge-intensive jobs increase over time, then the content of the average working hours will gradually change through the years, and therefore it cannot be used as a fixed measuring-rod over time. In economic terminology, this phenomenon is called *quality drift*. It is said that the “quality” of the average working hour changes over time, usually it rises gradually from year to year. The everyday meaning of the word quality, if there is any such thing, must not be mixed up with the strictly defined economic concept.

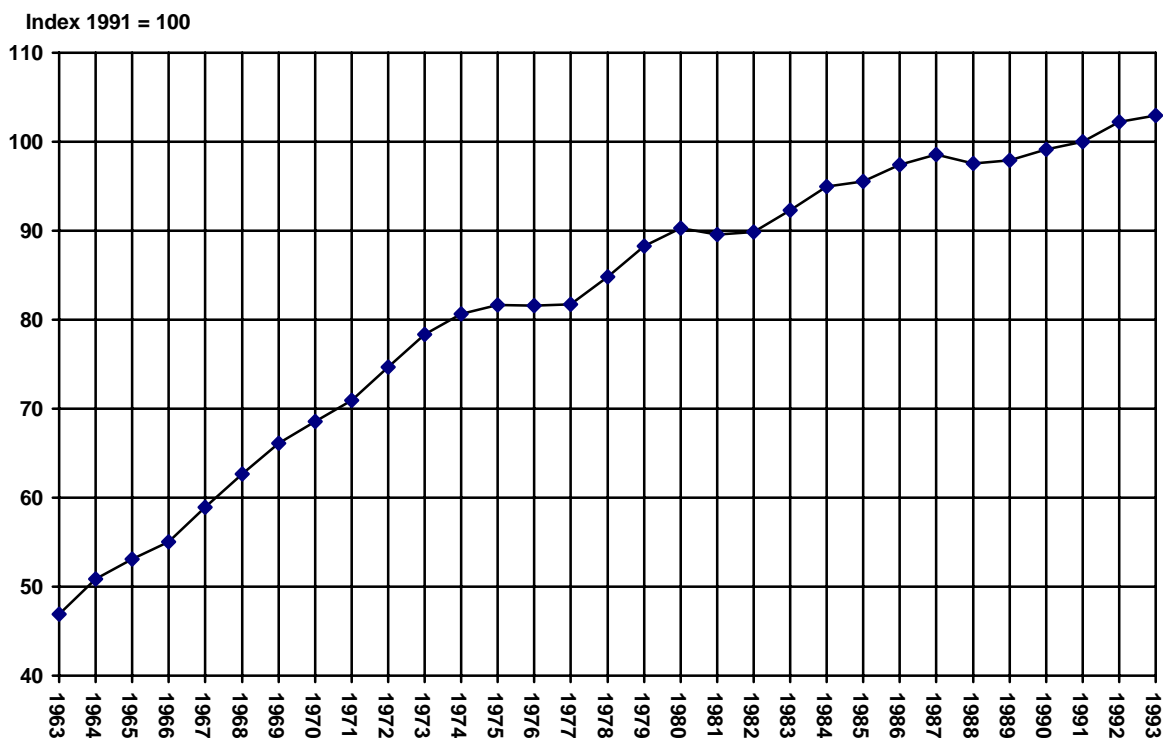


Diagram 2.4. The quality drift of an average working hour, 1963–1993. Source: Statistics Sweden, National Accounts, and own calculations.

² This was how J.M. Keynes defined the “labour unit” in his *The General Theory of Employment, Interest and Money* (1936). Vide chapter 4 – “The Choice of Units”, p.41 in particular.

From diagram 2.4 it may be concluded that the adjustment for quality drift is highly justified. The quality of an average working hour has more than doubled during the period 1963–1993. The average rate of increase was 2.6 percent per annum.

In the 1960's there was a real quality boom. The quality of an average working hour increased by an annual 5.4 percent on average during 1963–1970. The 1970's brought on a slowdown of the increase of the quality content of the working hours. The average drift was 2.8 percent per year, *i.e.* only slightly more than half the average of 1963–1970. The slowdown of the 1970's got even worse during the 1980's. For some years, in particular at the end of the decade, it is hard to discern any quality drift at all. The average rate of increase for the decade as a whole was a scanty 0.9 percent per annum. In particular, the period after 1987 was characterised by quality stagnation, with an average annual increase of only 0.2 percent. The weak development of the 1980's has persisted into the 1990's. The average rate of increase during 1990–1993 was merely at 1.2 percent per year.

The definition of the quality of employment directly leads to the possibility to factor the volume of employment according to the equation

$$\text{Volume of employment} = \text{Number of working hours} \times \text{Average quality of employment}$$

Clearly, the number of working hours is a component of the volume of employment. Therefore, the volume of employment is a more comprehensive employment measure than is the number of working hours. Hence, we prefer the volume measure to the number of hours.

If we only count the number of working hours, without making any quality adjustment, we will miss the doubling of the quality of the working hours during the three decades we examine. The statistics of the actual employment will then be entirely misleading, since the number of working hours only partly covers the phenomenon we aim at measuring.

When we adjust the employment for the quality drift, we create a particular unit of measurement, which we shall call the *labour unit*, and which corresponds to one volume unit of employment. The labour unit is a standardised quantum of employment, in the sense that the qualitative knowledge content of the employment unit always remains at the same magnitude, regardless of the point in time. This standardisation is of great value for the analysis of the employment problem, which in its deepest meaning is about the mobilisation of our slumbering knowledge potential.

The volume of employment is the most subtle of the employment measures, superior to both the number of employed and the number of working hours. The problem is that the volume of employment is not being computed in the official statistics, a fact which is as incomprehensible as it is annoying. It is very urgent that Statistics Sweden expands its statistics production by these computation, in accordance with the recommendations of the new System of National Accounts *SNA* 1993.

For the limited purposes of this book, we must circumvent this shortcoming by calculating a time series for the volume of employment. But how can this be done? The principles of the calculus must be founded on the relation between production and employment. All production requires work. Production and employment are really only two sides of the same coin – the paid activity.

When John Maynard Keynes, James Meade and Richard Stone laid the foundations of the national accounts in the 1930's, the concept of "domestic product" [then "national product"] was entered as a measure of the economic activity in a country. By measuring the domestic product, a correct estimate of the employment, adjusted for the quality content of the working hours, could be obtained. The very point of measuring the domestic product is thus to obtain a quality-

adjusted measure of employment. Keynes also concluded that the domestic product and the volume of employment "amount to practically the same thing".

The principle behind the calculus is simple: The volume index number of employment and the domestic product always accompany one another over time, which means that the volume of employment always stands in direct proportion to the volume of domestic product. Therefore, we may measure the one with the aid of the other. If we have data on the domestic product volume, then we can use it to compute the volume of employment.

However, this principle presupposes that the volume of production can be computed *independently* of employment, for if employment figures are used to calculate the production volume, we will be moving in circle. Unfortunately, independent calculations are only available for private sector employment and production. Therefore, the principle may only be applied to the private sector.

The government production, which is not being sold on markets, is *valued* by the production costs (which are the same thing as the wage costs, since the profit mark-ups are zero in the public sector according to the cost price principle). For this reason, no independent valuation of the government volume of production can exist.

In order to circumvent this problem, the official national accounts of today resort to a completely arbitrary assumption: That the quality drift of the public sector employment is zero. This zero assumption leads to significant errors in the official statistics of the volume of domestic product and the volume of employment. The growth rate of the volume of employment is under-estimated every year when the quality of public sector employment rises, and vice versa when it falls.

The quality drift of public sector employment may be calculated by using the private sector employment quality. The time series obtained for the public sector may easily be combined with the private sector production volume data to yield a time series for the volume of employment for the economy as a whole.

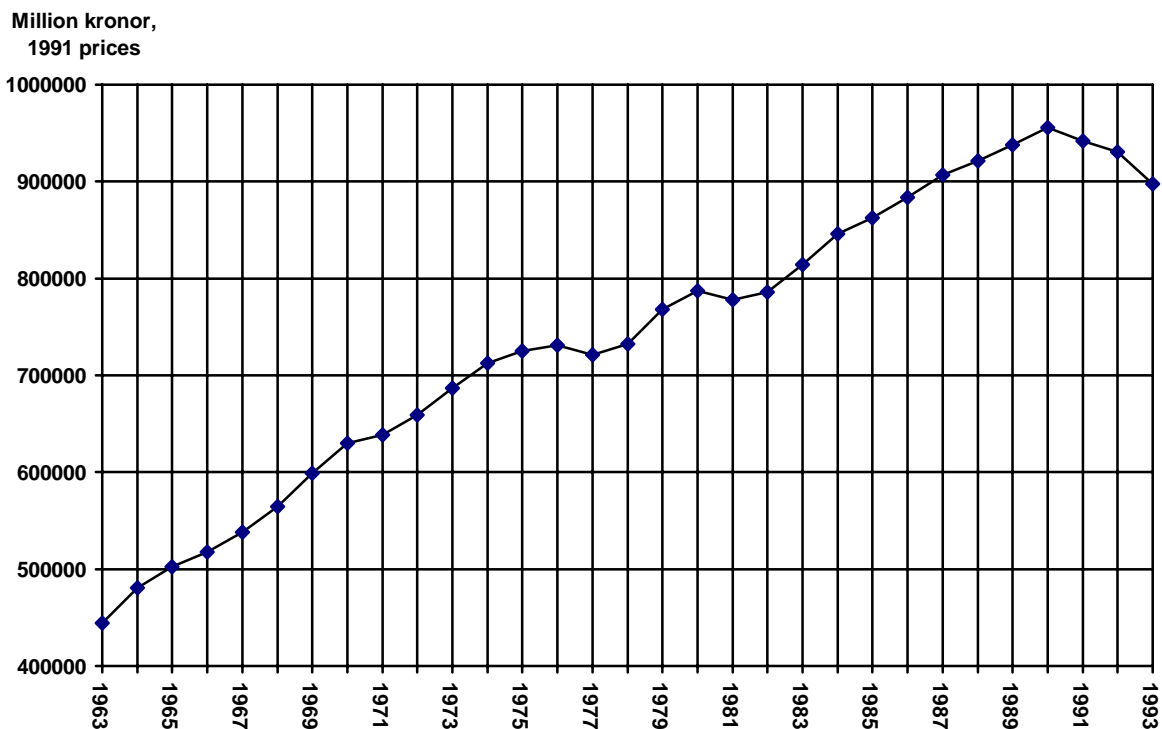


Diagram 2.5. The volume of employment 1963–1993 (compensation of employees, including collective fees, at constant prices). Sources: Statistics Sweden, National Accounts and own revisions.³

As is shown by diagram 2.5, the volume of employment was doubled during the period 1963–1993. The total increase amounted to 102 percent, corresponding to an average annual rate of increase of 2.3 percent.

The volume of employment increased every single year of the period 1963–1976. During the years 1963–1970, the volume of employment increased by 5.0 percent per year on average, to slow down to 2.5 percent per annum during the last years of uninterrupted expansion, 1970–1976. The slowdown followed the so-called "dead stop" – the sharp tightening of the fiscal and credit policies in 1970. In the sequel, the "lost years" of 1971–1973, the Swedish economy grew considerably slower than it did in the 1960's, but also markedly slower than that of other industrialised countries.

The international business cycle turned sharply upward in 1972–1973. The demand for raw materials increased very rapidly, and the prices of primary goods sky-rocketed. The most spectacular of the price increases were administered by the OPEC oil cartel: the winter of 1973–1974 was pretty much imprinted by the first "oil crisis".

During the years after the oil crisis, the international economy went into stagnation. Employment growth was sluggish and unemployment increased dramatically in many industrialised countries. As far as Sweden is concerned the "bridging years" of 1974–1976 were mediocre: the volume of employment increased slowly by historical standards, even slower than during the "lost years". But by international comparison, the period stands out as pretty decent. The stagnation was even worse in other countries.

The "bridging years" got their name from the expansionary economic policy pursued by the Swedish government throughout that period. The international recession were to be bridged over, companies got subsidies to keep the staff on payroll and to build up stocks of goods in order to prepare for the coming international business upswing to be met by a Swedish supply of products.

Unfortunately, the upswing did not become as vigorous as expected, and the products that came into demand in the first place were not the steel which gathered rust in Swedish warehouses at the time. But regarding employment, the bridging over had still been a success. It was abruptly ended, however, by the new liberal-conservative government devaluating the currency and tightening up the fiscal stance in 1977. The construction of the poorly designed, but still functioning, bridge over the recession was finished, which resulted in the Swedish economic activity plunging into the depths.

In 1977, the volume of employment fell in absolute figures, for the first time since World War Two. The situation did not improve much in 1978 – the growth was so weak that the employment loss of 1977 was barely regained. Thus, the years of 1977 and 1978 were characterised by a complete employment stagnation. It was during these years that the permanent economic "crisis" of Sweden got started.

A real recovery did not gather momentum until 1979. The volume of employment increased by 4.8 percent, which was largely due to an easing of the domestic economic policy –

³ The volume of employment refers to the aggregate labour exerted by employees and entrepreneurs. Since data on the wages of the entrepreneurs is missing in the national accounts, the entrepreneurs have been assumed to earn the same wage level as the employed in each industry. The labour exchange with the rest of the world is assumed to reflect the quality level of the domestic average working-hour. Since net wages from the rest of the world are counted excluding collective fees in the national accounts, they have been adjusted upwards by the domestic average collective fees mark-up. It should be noted that these assumptions make very little quantitative difference for the time series as a whole.

not least during the "Ullsten ministry" in between the two liberal-conservative three-party coalition governments. But the most important explanatory factor probably was the international business upswing in 1978–1979.

The buoyant international business conditions was once again ended by an oil price shock. The second oil crisis 1979–1980 became the starting-point of the worst downturn of the international economy since the great depression of the 1930's. The Swedish economy was dragged down, and the recession was further aggravated by the absence of a proper, counter-cyclical policy, for this time no ambitious attempts were made to bridge over the trough.

In 1981, the Swedish volume of employment fell for the second time since the War, by 1.2 percent. In a way similar to 1977–1978, no real recovery set in the following year. It is true that the volume of employment did increase in 1982, but only by 1.1 percent, which was not even enough to compensate the reduction during the previous year.

The employment growth of the 1980's got started in 1982, and lasted until 1990. During 1982–1990, the volume of employment increased by 2.4 percent per year on average. From an historical perspective, that figure is not remarkably high. It is comparable to the period 1970–1976, which was regarded as very problem-ridden at the time.

In 1991 the volume of employment turned downwards. During the depression years of the 1990's, the volume of employment has decreased from year to year, by 1.5 percent in 1991, another 1.2 percent in 1992, and a dramatic 3.6 percent in 1993. The total slide 1990–1993 was no less than 6.3 percent, corresponding to 2.1 percent per annum. In 1993, the volume of employment had fallen down below the level of 1987, which is a large slide, but not quite as remarkable as the number of employed or the number of working hours would suggest.

From our diagrams of the employment development as counted in terms of hours and of volume, respectively, and the linking diagram of the quality of the working hours, we may conclude that the employment expansion of the 1980's was of an entirely different kind than that of the 1960's.

In the 1960's, the number of working hours decreased from approximately 6.6 billion in 1963 to 6.4 billion in 1970. Both these years were decidedly boom years. In the intervening recession, the number of working hours went down to 6.3 billion. The increase in the volume of employment during this period was entirely due to the quality drift of the working hours, which over-compensated the decrease in the number of hours worked.

Also in the 1970's, working efforts were reduced, when counted in hours. At the end of the 1970's, the figure was below 6.1 billion hours per year. Despite this decrease in the number of working hours, the volume of employment increased during that period. This was so thanks to the gradual increase in the quality of the working hours, even though this was much slower than it used to be in the 1960's.

In the 1980's, the trend changed. At the end of the 1980's, nearly 6.7 billion hours were worked annually, an increase by well over 10 percent compared to the beginning of the decade. Still the volume of employment increased more slowly in the 1980's than it did in the 1970's. The explanation of this lies in the much more modest increase in the quality of the working hours.

Thus the 1980's stand out from earlier periods in that we worked more and more hours, but without doing any more qualified tasks. The employment expansion of the 1980's was almost entirely of a *quantitative* nature – it was, metaphorically speaking, a matter of doing more of the same kind of work, rather than moving over to new, more qualified activities.

The fact the amount of work increased so rapidly in terms of working hours throughout the 1980's, has decidedly contributed to veil the weak quality drift during that period. If this is not taken into consideration, one seriously risks going astray in the analysis of the employment problem. We can never disregard the fact that the employment problem also has a qualitative aspect. To create much work, as counted in hours, is no great problem. If we would feel inclined

to clean the pavements using tooth-brushes, there are unlimited amounts of work to do. But that does not solve the employment problem. There is a difference between meaningful employment and work as a pastime.

All in all, the development of the volume of employment shows the same overall pattern as the number of persons employed: a more or less continuous and steady increase, right up to 1990, and then a decline during 1991–1993. But a closer inspection of the scales of the diagrams reveals that the changes in the volume of employment are of a completely different percentage range than the changes in the number of employed. The total increase in the number of employed from 1963 to 1990 roughly amounts to 20 percent. The corresponding figure regarding the volume of employment, for that same period, is about 100 percent. The opposite holds true for the depression of the 1990's: The number of employed slides down by some 12–13 percent, while the volume of employment "only" falls by slightly more than 6 percent.

Does this imply, then, that the employment problem of today's Sweden is less acute than one first was tempted to believe? The answer to that question must be promptly in the negative. The employment problem does not refer to the *absolute* size of the actual employment, but to the actual employment as compared to the potential, *i.e.* the *rate of employment*. We simply know nothing about the extent of the employment problem, until we have measured the rate of employment.

3. How large is the employment problem?

This chapter will be dedicated to the question how to define and measure the rate of employment. Taking these principles as starting-point, we shall produce a time series for the rate of employment during 1963–1993, by the aid of which we may judge the extent of the problem we are to solve.

The rate of employment is calculated as the quotient between the actual and the potential employment. The best measure of the actual employment is the volume of employment – a volume index. For the sake of comparability, the potential volume must also be measured as a volume index, which we shall call the *potential volume of employment*. The rate of employment thus becomes a quotient between two index number – one of the actual employment (in the numerator), and another for the potential (in the denominator).

If we were to count employment as the number of working hours, which is not an index number, nothing would prevent us from computing the number of *non*-working hours (the difference between potential and actual employment). That procedure is feasible simply because we are using an objective unit of measurement – the number of hours. But when we are dealing with index numbers, this is no longer possible. This is so because of index numbers are void of meaning unless one refers to a *base year* as a norm for comparison.

Take *e.g.* the consumer price index (CPI). If you get the information that the 1987 CPI was 167.0, and the 1988 figure was 176.7, you have no use at all for the difference $176,7 - 167,0 = 9,7$. The figure 9,7 does not say a thing about how much prices have risen. Only the quotient between the CPI of 1988 and 1987 ($176,7$ divided by $167,0 = 1,058$) will tell us something about the price increases on consumer goods – that they have increased by 5.8 percent.

Since the rate of employment is an index number, we cannot find any absolute norm defining what "full employment" should be taken to imply. An index number will tell us how many percent higher or lower the rate of employment is in one year, as compared to another. The level of the index number depends entirely on the base year chosen, and the base index number set for that year. The usual procedure is to set the base index number at 100, in order to facilitate the percentage interpretation of the index numbers.

If a base year is picked arbitrarily, and the rate of employment is set at 100 percent for this year, purely coincidental factors could make the index number exceed 100 percent in other years of the time series. For this reason, it is suitable to take as the base year that year which showing the *highest* rate of employment of all in the time series, and set the rate of employment to 100 percent for this particular year. This method will guarantee that the rate of employment does not exceed 100 percent at any other point of the time series than the base year. But it does of course not ensure that we will never ever reach a rate of employment exceeding 100 percent in the future.

The suitability of this principle presupposes that the time series covers a period of really good years. In our context this will cause no problems, since we are studying the development during 1963–1993, a period which covers the golden years of the 1960's. If we can raise the rate of employment permanently to the highest of all values during the period 1963–1993, we have no doubt solved the employment problem.

*

The potential employment is the population's aggregate power to work for gain. The word "power" is affiliated to "wealth", and another word for "wealth" is "capital". Thus it can be said that the power to work for gain constitutes a *human capital*. The human capital includes all productive knowledge and skills, all ability to co-operate and organise, in short – all capacities which may be turned into employment and production.

Employment and production arise when this knowledge and these skills are activated in paid labour. The rate of employment – the quotient between actual and potential employment – measures the pace of the turning of knowledge into actual production, or the *intensity* of use of the human capital.

Of course, human capital differs in many respects from material *real capital* (machines, buildings and the like). One important difference in our coherence is that human capital cannot be bought or sold. Knowledge and skills are personal and inalienable. The only way to mediate them is to *hire* them out. When we are gainfully employed, we are hiring out the services flowing from our human capital: we sell the *labour power*, not the human capital as such.

The actual employment is tantamount to the *demand* for labour services, to *use* productive knowledge. The potential employment is the *supply* of human capital, of knowledge available to productive use. The higher the demand for labour in relation to the supply of human capital, the dearer the labour becomes. In this respect, human and material capital are similar. Take *e.g.* commercial real estate. When the demand for rental premises increases in relation to the space available, the rent will be pulled up. The same applies to the "rent" for labour as well: the higher the rate of employment, the higher the *real wage level*.

Provided that the real wages always adapt to balance demand and supply, the relation between the rate of employment and the real wage level is *mathematically proportional*. This relation facilitates the measurement of the rate of employment enormously – in principle. But what appears to be easy in principle is often difficult in practice. Such is the case here, and the difficulties primarily depend on two circumstances:

Firstly, the concept of the "real wage level" must be defined, unless we shall get a completely erroneous indicator of the rate of employment. Therefore we shall devote the whole of the next section to this delicate question.

Secondly, wages seldom adapt to balance demand for labour to the supply of human capital. In other words, the presupposition behind the simple proportionality between the rate of employment and the real wage level does not hold true in practice. But even if the wage adaptation does not take place in the real world, there always exists a *hypothetical* real wage level, at which the demand and supply *would* be in equilibrium. We shall devote a section to the question how to find this *equilibrium real wage*.

When these definitions, principles and calculations have been carried out, we can produce a fairly correct index series of the rate of employment in Sweden during the period 1963–1993. When we have in our hands both the rate of employment and the actual volume of employment, we may also compute an index series of the development of the human capital.

The Real Wage

The domestic product is the sum of all paid activities performed in a country during a year. It arises when our knowledge and skills are turned into paid labour. The *volume* of the domestic product and the *volume* of employment are merely two sides of the same coin – the quantity of paid activity.

The value of the domestic product originates in its consisting of paid activities. The principle is simple: When somebody pays for an activity, somebody else gets paid.

The *disposable income* is what remains available for the person being paid – after the process of social income distribution – to use in *consumption* and *saving*.

In the national accounts, the economy is partitioned into *sectors* – the business sector, the public sector and the household sector.⁴ In order to record the transactions between these *domestic sectors* and the rest of the world, a *foreign sector* has been set up.

⁴ These main sectors are in their turn divided into sub-sectors: the corporate sector into financial and non-financial corporations; the government sector into the central government (the State), local government (the

Part of the domestic product arises by income-creating transactions (paid activity) between domestic sectors and the foreign sector. By subtracting these transactions, we obtain the *national income*.⁵ Thus, the national income is the sum of all income created in the domestic sectors, when the *domestic human capital* is set in motion.

In the same way as the domestic *product* corresponds to the aggregate volume of employment of all sectors, the national *income* corresponds to the *domestic volume of employment*, the amount of domestic knowledge which has been mobilised during one year.

The whole of the domestic human capital belongs to the household sector, which thus supplies all domestic labour and is the recipient of all domestic wages. The wages constitute part of the households' disposable income, and is thus used to households' private consumption and to saving. This is a rewarding state of affairs, implying that we can calculate the *purchasing power* of the domestic wages. The purchasing power of an income is determined by *what it buys*.

In order to calculate the purchasing power of the wages, we must first know what the wage-earners buy. The *domestic* wages avail themselves to these calculations, which is not the case with the aggregate wage bill for all sector. This is so because we do not know what the foreign wages are used for. Due to this, the computations of the rate of employment must refer to the *domestic* rate of employment, *i.e.* the quotient between the actual and the potential *domestic* volume of employment.

*

In order to obtain the real wage level, we must make a purchasing power adjustment of the money wage level, by dividing the money wages by a suitable price index. Since the wages make up part of the households' disposable income, it is natural to use a price index (a "deflator") covering all that the household sector buys with its disposable income, *i.e.* the whole of the private consumption and all household saving.⁶

The most common price index is the consumer price index, which covers selected parts of the private consumption. We would however wish to cover not only all private consumption, but also all household saving. A comprehensive consumption deflator is easily obtained from the national accounts, but the savings are trickier.

Part of the saving takes place *actively* in the shape of *investment*. Investments are purchases of activities which create durable objects (*e.g.* the construction of a house). This kind of saving is "active" because it contributes directly to the domestic product and the employment. The remainder of the saving takes place by acquisition of ownership rights to objects already produced (*e.g.* real estate purchases, bank savings or acquisition of equity). This *passive* saving neither contributes to employment nor to domestic product.

Besides all that the households *buy* for their income, they also receive a host of different services and subsidies from the public sector. Health care, education and other services which

municipalities) and the social security funds; the household sector into households and NPISHs – Non-Profit Organisations Serving Households; etc.

⁵ The difference between the domestic product and the national income is usually small, and it might just as well be positive as negative.

⁶ An important detail in this connection is that purchases of passenger cars and other durable or semi-durable consumer's goods are regarded as consumption in the national accounts of today. All purchases of newly produced durable objects should rightly be considered as investments. Moreover, the depletion of already existing capital objects should be subtracted. All these adjustments have been carried out consistently throughout the whole presentation. Exponential write-down by the Perpetual Inventory Model has been applied throughout, using the following write-down factors: consumer semi-durables 30 percent per annum; consumer durables 15 percent p.a.; passenger cars 12 percent p.a.

are supplied free of charge, or at heavily subsidised prices, also contribute to the *total consumption of the population*,⁷ without increasing the private consumption expenditure. That kind of *in natura transfers* lower the households' cost of living. If the public sector supplies free education and free libraries, then one does not have to open one's own wallet. For this reason, a price index of the households' purchases must be adjusted to also reflect this kind of phenomena.

The numerator of the real wage quotient is the money wage level. Let us now turn to the matter how to define that magnitude.

*

For an income to be a *wage*, three conditions must be fulfilled:

Firstly, it must be the same person who carries out the work and receives the income. All "leisure incomes", like corporate profit and various kinds of transfers, are not counted as wages. *Secondly*, the income must remunerate the time spent at work. This implies that sick pay and similar remunerations which are received by people who have jobs, but are not on their jobs, are not part of the wages. *Thirdly*, the remuneration must be paid immediately. This time criterion implies that pensions and other delayed remunerations do not count as wages, even if their size depends on how much work one has done earlier.

It is essential to distinguish between wage costs, gross wages and net wages. *The wage costs* are the wages from the perspective of the enterprises, *i.e.* including collective fees. By subtracting the collective fees, we obtain the *gross wages*, which are the wages negotiated by the parts of the labour market.⁸ The gross wages less income tax equals the *net wages* directly payable to the wage earner, often called the *take-home wages*.

When divided by the volume of employment, the wage cost, gross wages, and net wages define the general *wage cost level*, *gross wage level* and *take-home wage level*, respectively. The rate of employment, *i.e.* the intensity of the usage of human capital, is linked to the *take-home wage level*.⁹

⁷ This item is being recorded in the national accounts of today. It includes the consumption of the households and the NPISHs, but also the part of government consumption which is directed towards specific individuals or households. Collective services like defence and road maintenance are not included. Moreover, subsidies of accommodation, subsidised pharmaceuticals, private practice health care, etc., and interest subsidies of housing.

⁸ This item is also recorded in the present national accounts, except for the entrepreneurs' wages. The adjustment for entrepreneurial wages has been made according to the assumption that the entrepreneurs earn the same hourly wages as the employees of each industry.

⁹ Unfortunately, the take-home wages are neither recorded in the national accounts nor in any other official statistics. The chief reason for this is that income tax is being calculated on the basis of the taxable income, which not only includes wages, but also pensions, sick pay, capital incomes, etc., but also miscellaneous deductions.

In order to compute how much tax is being paid from the wages part, the wages must first be separated from the whole of the income sum, and thereafter the tax bill must be distributed in proportion to the wage share. This calculation, which seems simple in principle, is very demanding in practice, since it has to be carried out on the individual level. This is due to the progressiveness of the tax system, which renders all simple national averages grossly misleading.

In order to make possible these calculations, the Swedish Institute for Social Research at Stockholm University have supplied data from the Survey of Living Conditions, the sample of which is some 7,000 individuals. The computations were made in co-operation with Olof Bäckman at the Institute. I owe both the Institute and Olof Bäckman for their great generosity.

The income sum used for the period up to 1990 is the "added net earnings" (a taxation concept), *i.e.* the sum of income from "service", real estate, "trade" and capital less "deficits from source of earnings". From 1991 on, the income sum is the "added earnings", *i.e.* the sum of income from service, and from "trade and business".

The computations show that wages are generally heavier taxed than other sources of income. In most years, the tax rate is between 3 and 9 percent (not percentage points!) higher for wages than for other income. This taxation bias has been computed for each year during 1967–1968 and 1971–1992. Since we need full

Thanks to the Swedish Institute for Social Research at Stockholm University kindly supplying data from the Survey of Living Conditions, we have been able to calculate take-home wages with a fairly decent degree of precision. Since we already did compute the volume of employment, we need only divide the take-home wage bill with the volume of employment to obtain the take-home wage level. After that, we re-calculate it to real wages by dividing by our price index of household purchases, including *in natura* transfers. How did this magnitude develop during the period 1963–1993?

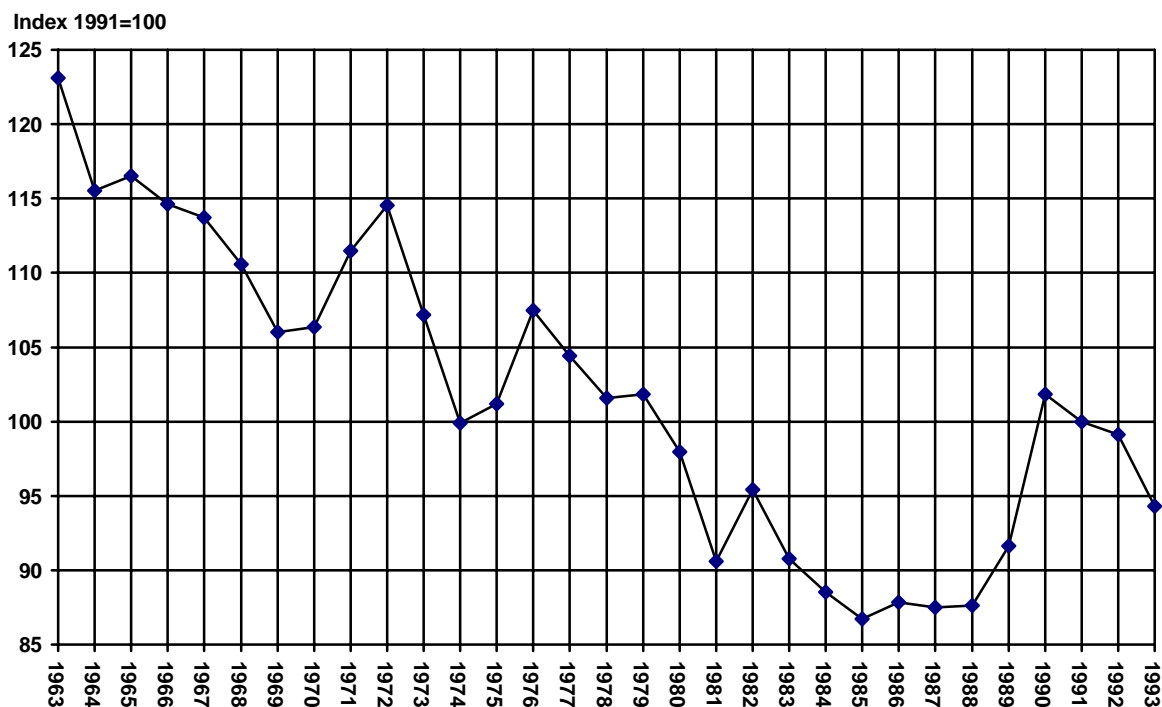


Diagram 3.1. Real take-home wage level 1963–1993. Source: Statistics Sweden, National Accounts, Survey of Living Conditions, and own calculations and adaptations.¹⁰

As is shown by diagram 3.1, the real take-home wage level fell trend-wise during the first twenty-five of the period. True, there were some temporary interruptions, in particular during the first of the "lost years" 1971–1972, but also during the "bridging over" years 1975–1976. In 1988, the real wage was no less than 34 percent lower than in 1963 – a lowering by 1.4 percent per year on average. In 1988–1990, the curve suddenly turns upwards, and there were no little increases ensuing: the rise was 4.0 percent in 1988–1989, and an astonishing 10.6 percent in 1989–1990; 15.0 percent altogether. Nearly half the decline of the preceding quarter of a century

coverage of the whole of the period 1963–1993, the bias of 1967–1968 has been used also for 1963–1996 and for 1969–1970; the bias for 1993 has been assumed equal to that of 1992. These coefficients have been used to adjust the data of the official taxation statistics regarding income taxation of physical persons. In that way, the tax rate for wage incomes has been obtained and used to calculate the take home wage bill for each of the years of 1963–1993.

¹⁰ There are strong reasons to believe that the low take-home real wage level of 1981 depends on statistical data error. The bias coefficient for income taxation is "suspiciously" high that year – 21 percent, as compared to 8–10 percent the surrounding years. Despite laborious efforts, we have not been able to find any source of error in the Survey of Living Condition material.

was recovered in only two years! After 1990, the take-home real wage level started falling sharply again, by a total 7.7 percent up to 1993.

Diagram 3.1 gives an indication of the rate of employment, but no more than that. The rate of employment expresses the balance between demand and supply of human capital. If the rate of employment is high, the value of labour, *i.e.* the real wages, ought also be high.

Unfortunately, there is no immediate connection between the two. The real wages would be a correct "barometer" of the rate of employment if demand and supply of human capital were balanced at all times. But such is seldom the case in practice. Therefore, we must also devote some effort to the relation between wage increases and the demand–supply balance of human capital.

The equilibrium real wage

In the end, the real wages are determined by the degree of *scarcity* of human capital. The higher the demand for human capital in relation to supply, the higher will the real wages be pulled – finally. But while waiting for the long run – a point in time which, much like Godot, will never appear – the *actual real wage level* constantly diverges from the *equilibrium level* at which the two forces balance.

These divergences primarily depend on the lion's share of the wages being set in contracts of rather long duration. The real wages are not negotiated, though – the money wages are. Once these deals are struck, the development of the cost of living – *the general price level* of the households' purchases – will determine the real wages. If the money wages are fixed at the settled level, and the prices rise, then the real wages fall. Thus, the development of the real wages are determined by the price development. Wage-earners can do nothing to raise or lower their real wages as long as the contracts apply.

It is not until the agreements expire and are due to re-negotiation that the wage earners may *compensate* the price development by changes in money wages. The compensation usually takes place by *increases* of the money wages. Only in exceptional cases are the money wages lowered, then as a "compensation" of a falling cost of living or a lowered rate of employment, or both.

A money wage hike entails a rise in the real wage. This is true in particular to a decentralised system of wage formation, where each group negotiates separately and at different points in time. The wage increases of one single group will then have a negligible effect on the production costs of the economy as a whole. The feedbacks between wage hikes and price increases will be small enough to safely be overlooked. A direct relation then holds between money wage increases and real wage increases, when viewed from the perspective of a single group.¹¹

Thus, the consequence of an imbalance between demand and supply of human capital are *money wage increases*, which are put into effect at the time for re-negotiation of wage agreements. These wage adjustments take place group-wise, and they raise the real wages of the single group to the equilibrium level which restores the balance between demand and supply of the human capital of that very group. Thus, the source of the money wage increases is a *real*

¹¹ The desired degree of centralisation of wage bargaining has been subject to long-standing controversy, not least in the light of the feedback mechanisms between wages and prices. It deserves to be pointed out that already a modest decentralisation – to a handful of groups bargaining one by one – will make the feedback becoming negligible. Not until a very far-reaching centralisation, say, to a couple of groups, is brought about will the feedback enter the picture, contributing to *magnify* the wage increases in order to "overcompensate" the price increases which these wage increases as such will give rise to. It is my firm opinion that this feedback mechanism seldom or never has had any significance in the Swedish economy. Even if we, from time to time, have had a high degree of centralisation, it still has not ever reached anything like that.

wage gap – that the actual real wages are lower than the equilibrium real wage when contracts are up for re-negotiation.

The wages agreed are the *nominal gross wages*, i.e. the money wages before income tax. But the cause of the increases in the gross wages are to be found in the *take-home real wages*, after income tax, are too low. Due to the *marginal effects* of income taxation, the relation between increases in nominal gross wages and real net wages is not directly proportional, not even for the single group of wage-earners.¹²

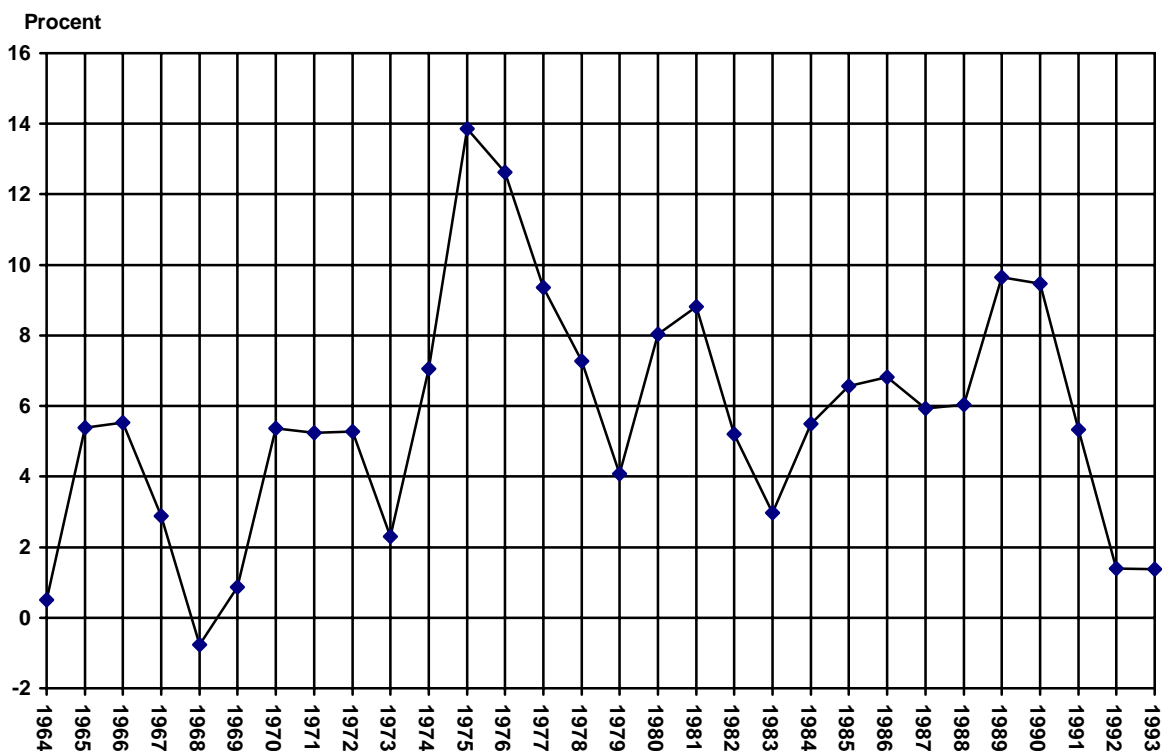


Diagram 3.2. Annual percentage increase of the nominal gross wage level, 1964–1993. Source: Statistics Sweden, National Accounts, and own calculations and adaptations.

As shown by diagram 3.2, equilibrium between demand and supply of human capital is a very rare occurrence. The money wage level has risen during twenty-nine of the thirty years of 1964–1993, with an average rate of increase of 5.7 percent per annum. The variations around this average are large. In 1968, the money wages fell in absolute figures. Only in five years – 1964, 1968, 1969, and the depression years of 1992–1993 – has the real wage level corresponded to the rate of employment.

The money wage level accelerated in 1964–1965, 1968–1970, 1973–1975, 1978–1980, 1983–1986, and 1988–1989. The year of 1964 was characterised by an extremely strong

¹² The marginal effect is not the same thing as the marginal tax rate of the income tax tariffs. Here we refer to the *causal* effect of an employment increase on the "tax wedge" between gross and net (or take-home) wages. By statistical regression analysis, this effect may be distinguished and computed at every point in time. The regression equation is $\ln W^N = b_0 + b_L \times \ln L + b_W \times \ln W^G + b_t \times t + e$, where W^G and W^N denote the gross and net (take-home) real wage, respectively, L the volume of employment, and t the year. The coefficients $b_L = 0,65$; $b_W = 1,00$; $R^2 = 83,0\%$. As expected, there is "neutrality" in $\ln W^G$ – the coefficient is precisely unity. The marginal effect is $1 - \exp\{b_L + e\}$, thus accommodating both the "normal" effect b_L and the deviations e .

business upturn. The domestic volume of employment¹³ increased by no less than 7.9 percent compared to 1963. The expansion weakened and reached the peak in 1965, when the volume of employment "only" increased by 4.4 percent. The next upswing, 1968–1970, worked similarly. The volume of employment increased by 4.8 percent in 1968, 5.9 percent in 1969, and by another 5.0 percent in 1970.

Business conditions were also good in 1973–1974. Employment increased by 4.2 percent in 1973, and by 3.7 percent in 1974. However, the slackening which followed the oil crisis implied that the rate of increase in 1975 was only 1.5 percent. In 1979, economic activity began to recover (the volume of employment increased by 4.8 percent) after the employment slide in 1977. But already in 1980 the expansion weakened (2.5 percent increase), and turned into an employment recession (of 1.2 percent) in 1981. Still, money wages accelerated during this period.

In 1989–1990 – the halcyon days of peak speculation – the domestic volume of employment rose by 1.9 and 1.8 percent, respectively. Thus, the rates of increase were modest compared to the upswings of the 1960's and the 1970's. Still, these years were characterised by rapid money wage increases – 9.6 percent in 1989 and 9.5 percent in 1990.

The rate of money wage increases slowed down in 1966–1968, 1975–1979, 1981–1983, and 1990–1992. All these periods were characterised by weakening, slowdown or recession in economic activity. Now, the meaning of words like "slowdown" or "recession" has changed considerably over time. In 1966, a year which was regarded as a recession year at the time, the volume of employment increased by 3.0 percent – nearly twice as much as during the "extreme over-heating" of 1988. Also in 1967, slow business prevailed, by the standards of those days: the volume of employment "only" increased by 3.9 percent!

The great wave of inflation, initiated by the oil crisis, gradually ebbed out over the years of 1976–1978, as did the little inflation belonging to the second oil crisis, in 1981–1983. During the depression years of 1991–1993, money wages increases came to a dead halt. From a rate of increase of 9.5 percent in 1990, the pace of money wage increases fell to a modest 1.4 percent in 1992 and 1993. The domestic volume of employment fell by 1.5 percent in 1991, 1.2 percent in 1992 and by another 3.6 percent in 1993.

To some extent, the rate of increase of gross money wages does seem to follow the business cycle pattern. But there is certainly no unique and stable relation between the two. The primitive but well-spread notion of wages going up rapidly in boom periods and slowly in troughs, accords rather poorly with reality.

The theory presented here explains *why* these stereotype notions do not make sense. We have already made clear that money wage increases are caused by *the take-home real wage level being too low in relation to the rate of employment*. A low rate of employment, *i.e.* economic depression, may well be characterised by high rates of money wage increases, provided the take-home real wages have been pressed down to a low enough level. In the opposite way, a flourishing economy combines perfectly well with a fairly stable money wage level, but only if the take-home real wages are let up to the level needed to close the real wage gap.

Thus, money wage increases in no way indicate economic "over-heating", but only that the take-home real wage level is lower than it ought to be.

*

Whenever the economy is characterised by a general inflation, which has been the case in Sweden during large parts of the period studied, the real wage gaps of the separate groups of

¹³ Note that these figures refer to the *domestic* volume of employment, cleared from the labour exchange with the rest of the world, as opposed to the employment figures of chapter 1.

wage-earners will grow larger as the prices rise, and be closed every time the wage deals are due for re-negotiation. Such is the rhythm of the so-called wage–price–spiral.

If the wage-earners re-negotiate at different times of the year, the groups who recently closed their deals will have a small, or negligible real wage gap. At the same time, the groups whose wage agreements are ripe for re-negotiation, will have a relatively large real wage gap. For the economy as a whole it is possible, though somewhat painstaking, to define an *average real wage gap*, which averages the positions of the "fresh-deal groups" and the "ripe-deal groups".¹⁴

Thus, the average real wage gap is turned into money wage increases at a rate determined by the pace of re-negotiation of wage agreements, when the wage-earners have the opportunity to compensate both price increases and changes in the degree of scarcity of human capital. From this we may conclude that the rate of money wage increases, in all essentials, is determined by two factors: the size of the average real wage gap, and the average duration of wage agreements, or the *compensation period* as we shall call it.¹⁵

The shorter the compensation period, the more often the money wage level is adapted to the real wage gap. Real wage gaps of the same size may give rise to widely diverging rates of wage increases, depending on the length of the compensation period. For example, assume that the equilibrium real wage is 10 percent higher than the actual real wage. If negotiations take place once a year, the yearly negotiated money wage increase will be 10 percent. But if money wages are re-negotiated twice a year, the money wage increase will be 10 percent *every six months*, which renders an annual rate of 21 percent (according to the principle of compound interest: $1,10 \times 1,10 = 1,21$), and if the compensation period is but one month, that same real wage gap will yield a yearly rate of money wage increases of 214 percent!

The shortening of the duration of wage deals is a characteristic phenomenon of economies plagued by very high inflation. In most cases, the shortening takes place, not by outright re-negotiation, but by various kinds of index clauses being entered into wage contracts, automatically adjusting money wages according to some suitably chosen cost of living index. The more frequent those re-adjustments, the worse the inflation.

¹⁴ The trouble with defining the average real wage gap is that the groups are unequal in size, and that the duration of the wage contracts differ. Therefore the average must be weighted in a way that adjusts for these differences.

¹⁵ The relation between a real wage gap and the wage increases may be described by a simple equation:

$$\frac{\text{New money wage level}}{\text{Old money wage level}} = \frac{\text{Equilibrium real wage level}}{\text{Actual real wage level}}$$

or, algebraically, $W_1/W_0 = w^*/w$. The equation can, and should, be interpreted in causal terms. To the right of the equals sign, we have the causal factor – the real wage gap – and to the left, we have the effect – the wage increases. The size of the real wage gap directly determines the size of the money wage level hike *per compensation period*. In order to translate this wage increase to real time, we must bring the length of the compensation period into this context.

Another problem in this coherence is that the ordinarily computed rates of wage increases are *backward-looking*. The rate of wage increases in t , refer to the *average* money wage level at t in relation to the *average* in $t-1$. Since the cause – the right-hand side of the equation – cannot precede the effect, we must compute the *simultaneous* wage increase at t , *i.e.* the relation between the wage level of December 31, and January 1, in the year t . This ratio can only be approximated: We use the geometric mean of the average wage levels in $t-1$ and in t as "closing" wage level in the year $t-1$ and "opening" in the year t . A geometric average is obtain by multiplying the two price indices and take the square root of the product. The method thus builds on the assumption that the pace of wage increases is smooth between the annual averages.

Thus, the length of the compensation period is the key factor between the size of the real wage gap and the rate of money wage increases as expressed in real time.¹⁶

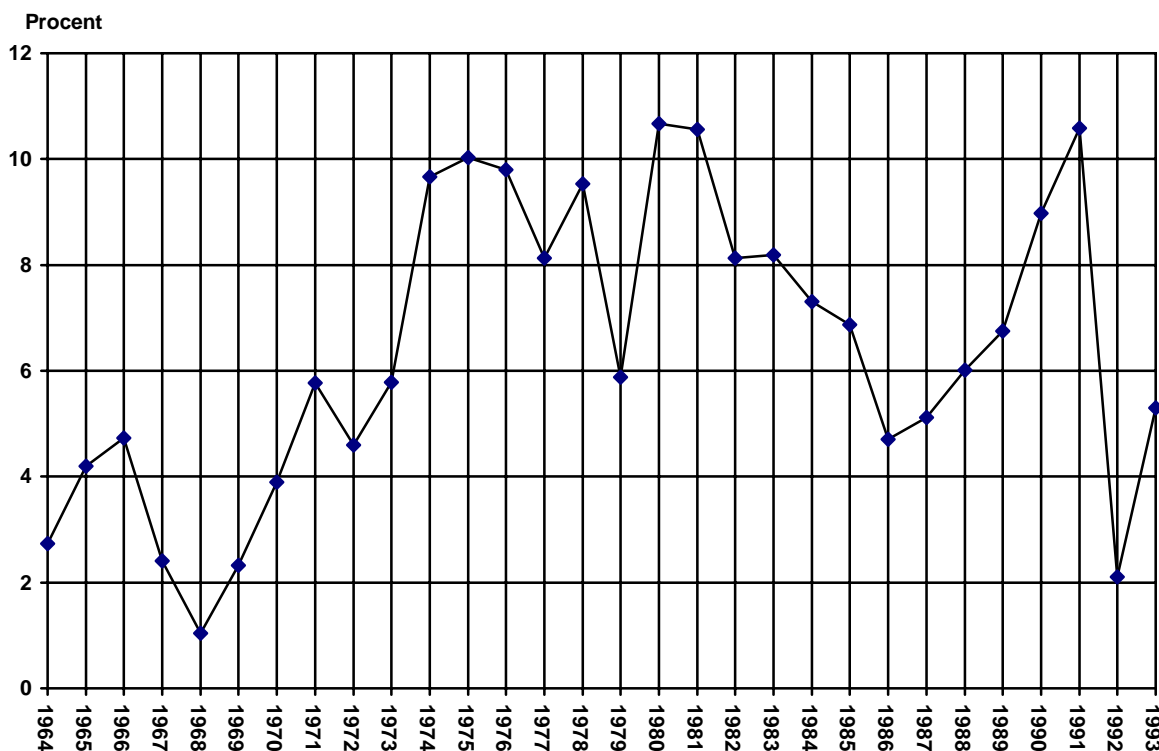


Diagram 3.3. Annual percentage increase of the households' purchases price index, adjusted for in natura transfers from the public sector, 1964–1993. Source: Statistics Sweden, National Accounts and own calculations and adaptations.

In practice, the length of the compensation period has not been constant over time – that we can infer from studying the rate of inflation in the prices of household purchases over time. By diagram 3.3 it is realised that this rate¹⁷ has varied between 1.0 percent and 10.7 percent per annum during the period 1964–1993. Throughout 1964–1973, inflation was modest – varying between 1 and 6 percent per annum. But in 1973–1974, the price level accelerates grossly. Except for a temporary slowdown in 1979, the inflation rate stayed over 8 percent all the way up to 1983. In the mid-1980's, inflation got back to more modest rates. It varies between 5 and 7 percent per year. The slowdown started in 1981 and went on up to 1986, when prices started accelerating again. Towards the end of the 1980's, inflation increased rapidly. It reached a peak of 10.6 percent in 1991. After that, the high rate of inflation ended abruptly. In 1992, prices rose by only 2.1 percent. In 1993, the rate once again increased, to 5.3 percent.

There are good reasons to suspect that the compensation period is shorted during the periods of high inflation, not least in the inflationary 1970's, when index clauses were common in wage agreements.

During the period 1963–1993, the normal pattern has been yearly wage agreements for the lion's share of the labour market. One must never underestimate the importance of the calendar

¹⁶ In order to obtain the annual wage hike quotient (W_1/W_0), the real wage gap (w^*/w) must be raised to a power equal to the number of compensation periods per year. Thus, it is true that $W_1/W_0 = (w^*/w)^j$, where j denotes the number of compensation periods per year.

¹⁷ Computed in the usual, backward-looking fashion.

year as a norm for patterns of economic behaviour. Even if the rate of inflation has varied extensively during the period, it has neither been high nor low enough to break the dominance of the calendar year over the pace of wage contract renewal.

The fact that the greater part of the labour market has been subjected to annual re-negotiations, does not necessarily imply that it takes a full year to compensate an inflationary gap by money wage hikes. There are a host of mechanisms contributing to the shortening of the actual compensation period. For instance, consultants and other free-lance professionals, working on short contracts, frequently have the opportunity to adjust their pricing. Moreover, ordinary employees have all sorts of extras over and above the contract wage, extras which may be changed at short notice. These mechanisms (and more) contribute to the shortening of the compensation period, if not to a revolutionary extent.

The gist of the argument is that we may presume that the compensation period on the Swedish labour market during 1963–1993 generally has been slightly less than one year. At times of high inflation, it has been somewhat shortened.¹⁸

When adjustments have been made to account for the variations of the compensation period, we may calculate the real wage gap for each year, and thus obtain the *equilibrium take-home real wage*, which is the correct indicator of the rate of employment.

*

The development of the rate of employment in the Swedish economy 1963–1993 is displayed by diagram 3.4. During the 1960's, the rate of employment went up, and the increase took place in two rounds. The first hike was brought about by the very powerful expansion in 1964, the second during the business upswing in 1968–1970. In 1970, the rate of employment reached its peak level during the period. For this reason, we have chosen 1970 as the base year, setting the rate of employment at 100 percent. Even if this is no absolute ceiling, we may – for the sake of convenience – refer to the rate of employment in 1970 as *full employment*, and compute the *rate of under-employment* in relation to this peak value.

¹⁸ Our data material consists of annual observations. These regular time intervals do unfortunately not fit in with the actual compensation period, a fact which must lead to slight errors in the computations. Since the compensation period has never been extremely short, the errors are likely to be small. We make use of a direct relation between the inflation rate of the household purchases, $\Delta P/P$, (remade in periodicity by geometric means just like the money wage increases – vide note 12), and the number of compensation periods per year, j . We assume that $j = 0,5 + 15 \times \Delta P/P$, implying a two year compensation period at zero inflation, and a six-month compensation period at a 10 percent annual inflation rate.

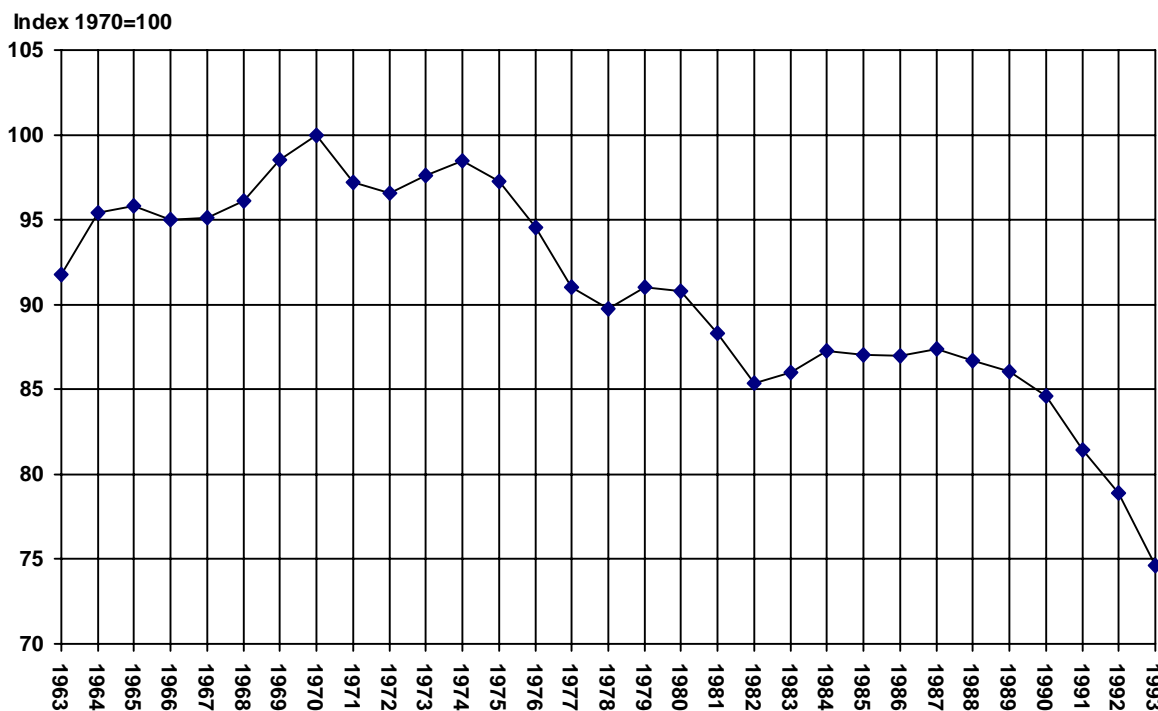


Diagram 3.4. Domestic rate of employment 1963–1993. Sources: Statistics Sweden National Accounts, the Survey of Living Conditions, own revisions and calculations.

Under-employment was about 8 percent at the beginning of the period, in 1963. Already the next year, it had gone down to 5 percent. The cause of the reduction was the record expansion of the volume of employment in 1964 – a mighty 7.9 percent in one year! After this rapid upswing, the economy entered a more modest phase of expansion, which turned into what was named a "recession" at that time, in 1966–1967. Still, the rate of employment was stable at 95–96 percent during 1964–1968. Thus, under-employment was merely 4–5 percent.

These last remains of under-employment were cleared by the business upswing of 1969–1970, which in fact is the last real boom Sweden experienced. Employment expansion was 5.9 percent in 1969, and 5.0 percent in 1970. At the peak, something similar to a currency crisis occurred. The balance of payments showed alarming deficits, and speculative pressures mounted against the krona. The government and the central bank (Riksbanken) reacted sturdily: a vigorous domestic tightening – "the dead stop" – was brought about in order to dampen the import and to strengthen the balance of payments, measures that put an effective end to prosperity.

In 1971–1972, the rate of employment fell to 97 percent. By today's standards, the three-percent under-employment does not appear very alarming. But at that time many economists – among them some who "set the tone" today (but who now sing another tune) – criticised the government in harsh wordage for suffocating economic activity and forcing up unemployment. The finance minister, Gunnar Sträng, had to take many torrents of abuse for his all too "fiscalist" view of the budget. The government ought to go in for vigorous spending and lower taxes in order to set the wheels in motion, that view was generally endorsed by economists.

Even though it did not come to much of a domestic expansion, a powerful international business upswing set off in 1972–1973. The activity of the Swedish economy, which usually

comes late in the international business cycle pattern, was blown out of the doldrums in 1973–1974. The rate of employment started increasing again, up to 98 percent in 1974.

The unusually strong international upswing pulled up prices of primary goods in a spectacular way. Corn and mineral prices sky-rocketed, but the most astonishing price increases were, of course, the oil price hikes, as they were further fuelled by the actions of the price cartel OPEC. The endearing of the raw materials strained the balance of payments in most industrialised countries. Governments generally reacted in the same way as the Swedish government had done in 1970: domestic demand was tightened up in order to strengthen the balance of payments.

Due to these reactions, the international economy was thrown into a very deep recession in 1974–1976. The growth rate of the Swedish economy turned downwards in 1975, and along with the growth rate fell the rate of employment – from 98 percent in 1974 to 95 percent in 1976. This gloomy development took place despite the government setting in a manifold of counter-measures in order to "bridge over" the international recession. It is not least for this reason that the bridging-over policy has fallen into disrepute: why should the government borrow and spend if that does not help?

But the bridging-over policy was far from ineffective. In international comparison, the development of the Swedish domestic product clearly differs in a positive direction during 1974–1976. It would be more appropriate to claim that the government did *too little* in proportion to the depth of the international recession. A stronger expansionary policy would have been needed in order to bridge things over more adequately. The actual outcome was a half-measure, a poorly anchored suspension bridge rather than a solid, straight landing-stage.

The employment conditions was seriously aggravated as the new liberal-conservative government brought the bridging-over to a halt in 1977, by devaluation and domestic austerity. The growth rate of the economy became negative in 1977, for the first time since the depression in the 1930's. The rate of employment fell dramatically – from 95 percent in 1976 to 91 percent in 1977, and 90 percent in 1978. Strangely, the miserable development during these years has been taken to demonstrate the failure of the bridging-over policy. But if you stop the bridging-over half-way, no wonder that economic traffic plunges headlong into the sea.

During the last years of the 1970's, international demand made a reasonable recovery. The Swedish economy also set off, after the usual time lag. Nor were any domestic restraints implemented in 1979. The cabinet crisis caused by the nuclear power disagreements, broke up the tripartite coalition, and the ensuing Liberal Party minority government (the "Ullsten ministry") showed to be capable of a good measure of budget liberalism, the happy consequence of which was an excellent 4.8 percent growth rate of the volume of employment in 1979. The employment rate rose from 90 percent to 91 percent.

The second oil crisis, in 1979–1980, had very much the same impact on the world economy as the first: balance of payment problems in the industrialised countries, followed by domestic demand tightening measures. In contrast to what happened during the first oil crisis, though, this time tightening-up measures consisted of drastic increases in the rates of interest. In particular, it was the American Federal Reserve Bank and the British Bank of England who forced up interest rates in a newly-awakened "monetarist" conviction that inflation should be fought at all costs. Due to the global linking of the financial markets, most countries – often reluctantly – were forced to follow suit.

The results of this monetarist mortification were disastrous for the international economy. Some of the developing countries with large accumulated foreign debts had to suspend payment. The galloping "debt crisis" threatened to destabilise the entire international credit-system. The economies of the industrial countries became stagnant. From already high

levels, unemployment ran out of control. The recession of 1980–1981 was the worst since the 1930's, both longer and more forceful than that of 1974–1975.

In Sweden the recession did the trick in 1981. The domestic product and employment volume fell in absolute terms for the second time since the 1930's. Sweden was one of those countries which were reluctant to raise interest rates. Unfortunately, the reluctance led to tardiness. By failing to raise interest rates in time, bases for speculations against the krona were created, which resulted in the devaluation of 1981.

Although the Swedish economy grew in 1982, the domestic product and the volume of employment merely returned to the 1980 level. But during those two years, potential employment had grown at its usual rate. The rate of employment, which was already as low as 91 percent in 1980 slid down to 85 percent in 1982. Thus the under-employment reached 15 percent in the trough of this recession.

The right-wing government proved to be just as reluctant to launch offensive measures against the recession in 1981 as it had been in 1977. The interest policy was, as previously mentioned, passive and tardy, which led to a currency crisis. The budget policy – which, as opposed to the interest policy would have paid off – remained passive. The budget deficit increased passively with the fall of the revenue and the increase of charges for unemployment and for the supportive contributions of the Labour Market Board. But a real, offensive expansion of the budget was not a measure they considered.

This passivity earned the government devastating criticism from the Social Democratic opposition. If the Social Democrats should win the 1982 elections, they would, to quote their leader Olof Palme, "put elbow room in place of tightened belts". Obviously, this rhetoric gained credence with the voters, for the Social Democrats did win the 1982 election and started their new deal by – devaluation and a policy of restraint!

In 1982 the international recovery commenced after the very deep recession. The background to the new expansion was not least the retreat of the U.S. Federal Reserve, when the international credit system had started to swing in earnest. Furthermore, the American government introduced a more expansionary budget policy. In 1983–1984, the global economy and the world trade grew very rapidly, just as fast, in fact, as it did in the 1960's.

When this international trade wave rolled into the Swedish economy, the conditions for exporting were better than ever before. The devaluations in 1981 and 1982 reduced costs for the export industry by more than 24 percent. Our international competitiveness was very good, and that was immediately manifested in a large volume increase of the exports. In 1983, it went up by as much as 10.1 percent.

The increase in exports also pulled upwards the domestic product and employment. The domestic volume of employment increased by 3.5 percent in 1983, and by 4.0 percent in 1984. The expansion was powerful enough to raise the rate of employment, to 86 percent in 1983, and 87 percent in 1984. Employment was on the right track during these years, even if things moved slowly. The massive under-employment built up since 1970 was in fact merely nibbled at.

The employment expansion slackened to 1.9 percent in 1985. Due to this weakening, the rise in the employment rate ceased as well. During the remaining years of the 1980's, the volume of employment increased at a surprisingly stable pace, ranging from 1.8 to 2.6 percent per annum between 1986 and 1990. But even though the *stability* of the increase was impressive – such a smooth conjuncture is not to be found in any other period – the *pace* was definitely unsatisfactory. This is shown with striking clarity in the rate of employment, which got stuck at 87 percent in 1985, and stayed on that level until 1988. After that it started *falling* again, to 86 percent in 1989, and 85 percent in 1990.

In fact, "the extreme boom" of the 1980's was not much glory in. All that was achieved was a small, hardly noticeable decline in the under-employment, from 15 percent in

1982 to 13 percent during 1985–1988. Then it rose again to 15 percent in 1990. Thus the under-employment was just as high during the heyday of the speculation boom as during the darkest days of the recession in 1982.

Facing figures like these, every honest person must wonder: In 1982, people queued up at the employment agencies, the Labour Market Board worked at high pressure, early retirement for labour-market reasons set new records. In 1990, on the contrary, businesses were crying for people, newspapers were full of "help wanted" advertisements, and unemployment scarcely existed. How does that fit in with the fact that the under-employment was just as high during both these years?

The fact is that it all fits very well, and the explanation can be found in the *quality-aspect* of the employment. When we defined the concept of the volume of employment, we stressed the importance of quality-adjusting the working-hours, in order to get a correct picture of the *contents of knowledge* in the rate of working. If the number of working-hours are plainly summed, without any quality adjustment, what obtains is merely a quantitative employment measure.

It goes without saying that the quantity of the employment can easily be raised as much as one wishes, at least up to a level where people simply do not have *any more time* to work. Just replace all machines with "good old" manual methods, and you shall see that Ol' MacDonald's farm will get busy! But being busy does not necessarily mean the same thing as getting much done.

The fact that companies cry for people, that people work for many hours, or that unemployment is low, does not guarantee that the employment rate is high. First, we must ask what kind of "people" the companies are crying for. Is it people who turn hamburgers or PhDs in engineering? And those who work an awful lot of hours – what do they do at work? Do they chase fare dodgers or do they operate on brains? And how do the unemployed spend their days? Drinking vodka at home in the kitchen or reading Goethe?

If a purely quantitative approach is used to digress the employment problem, a thick grey layer of paint is rolled over all these nuancing questions. In short, the question of how to activate the population's knowledge and skills is reduced to a matter of wasting their time.

But the real meaning of the employment concept is the mobilisation of knowledge, not how to waste time. The volume of employment shows how much is performed in the economy, not how busy the population is. The rate of employment does not show how much time people spend on their jobs, but how well they use their productive skills and knowledge.

From chapter 2, we recall that the employment expansion during the 1980's was markedly quantitative. The number of working-hours increased very rapidly, while the qualitative content of the working-hours increased very slowly. Herein lies the explanation of the apparently full employment during the 1980's. Certainly people spent more and more time at work, but this time was mainly filled with rather knowledge-extensive activities. Therefore, the aggregate *usage of knowledge* remained on the low level that was established during the 1970's.

Under-employment is not a new problem in Swedish economy. There was *no* full employment up to 1990, as one may easily be deceived into believing. The employment situation was already poor at the end of the 1970's, and deteriorated even more at the beginning of the 1980's. "The extreme boom" during the years 1983–1990 did not bring much improvement. On the contrary, the rate of employment *fell* during the "over-heating" period 1987–1990.

The economic depression during the 1990's has brought about a catastrophic collapse when it comes to the rate of employment. The slow, down-going trend that started in 1987 accelerated enormously after 1990. During 1991–1993, the actual volume of employment fell, by 1.5, 1.2, and 3.6 percent, respectively – 6.3 percent all in all. Since the human capital grew

every year, the employment rate fell even more; in 1991 it was 81 percent, in 1992 79 percent, and in 1993 it was a rock bottom 75 percent. The under-employment rate grew from 15 percent in 1990 to an unparalleled 25 percent in 1993!

The employment problem of today is gigantic. One quarter of our employment potential is not in use. Self-evidently, the solution to a problem of these dimensions cannot be found by tinkering at the edges of the economic policy that brought us right into this morass. A *completely new* economic policy is needed, radically different from that which has characterised the last 15–20 years. The remainder of this book will be devoted to such an overall strategy to regain full employment.

It is important not to regard the employment issue as a problem. Under-employment is certainly a terrible waste of people’s knowledge and creativity. But the waste also involves possibilities: Here are enormous, slumbering resources, which may be utilised in order to increase prosperity. Let us take a simple numerical example: If we could instantly raise the employment rate to the level of 1970, the national income would increase by *one third*, compared with the situation today. Spread thin over the whole population – from the cradle to the grave – it would an annual income increase of almost 50.000 kronor per person. It is of course true in practice that the rate of employment cannot be raised straight off, but the numerical example still serves well to illustrate what can be achieved by dealing with the problem.

During the period 1963–1993 as a whole, the actual employment has grown much less than the potential employment, hence the huge under-employment of today. But by how much did the potential employment grow? That question is now easily replied to, since we know both the actual volume of employment and the rate of employment.

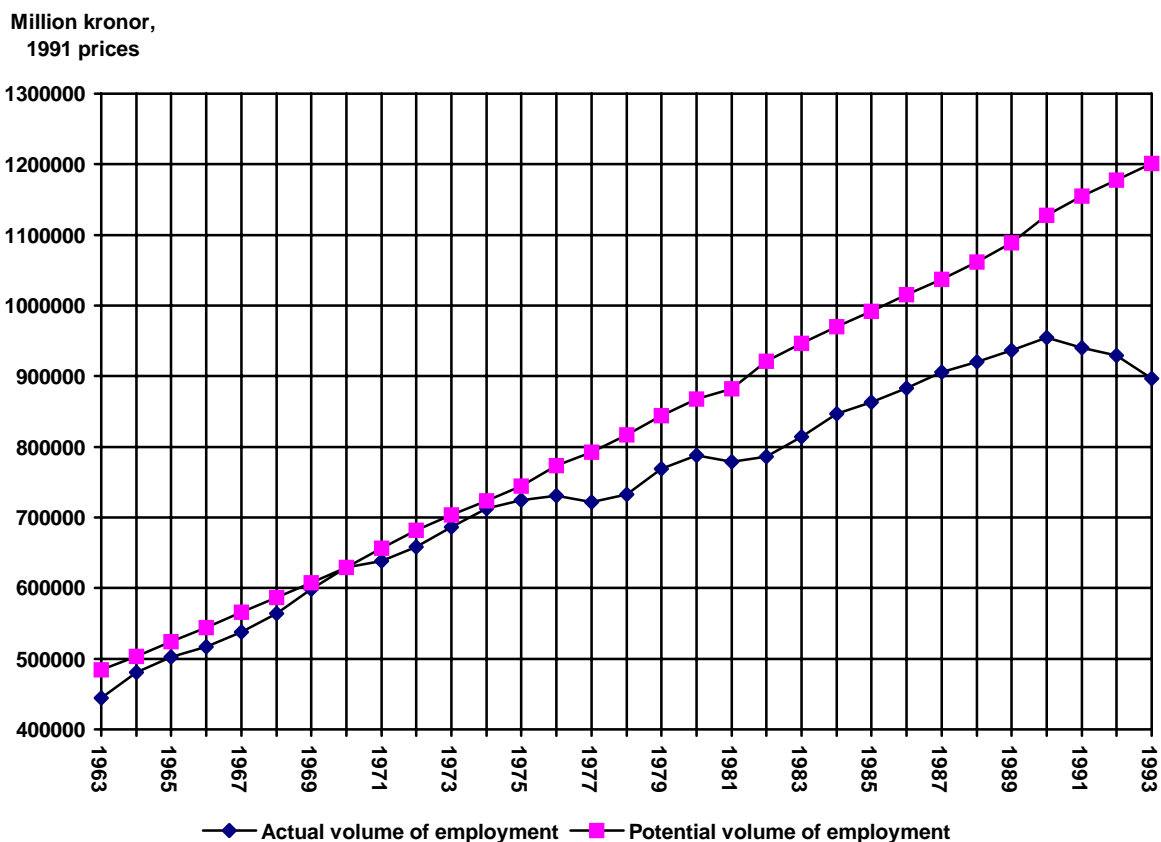


Diagram 3.5. Actual and potential volume of employment during 1963–1993. Sources: Statistics Sweden, National Accounts, Survey of Living Conditions, and own adaptations and calculations.

Diagram 3.5 shows that the potential volume of employment grew steadily in the 1963–1993 period. This is exactly how it should be.¹⁹ The potential volume of employment, or the human capital, express the aggregate productive knowledge of the population. For obvious reasons, the knowledge mass of the population is a very sluggish, slow-moving entity, which is likely to increase steadily year by year under normal circumstances.²⁰ Just like the graph.

The diagram also gives a very clear picture of what is required to solve the employment problem. By definition, under-employment can only decrease if the actual volume of employment increases more rapidly than the potential. The two curves will converge to one another and the gap between the two – the under-employment – will be reduced.

The fact that the potential employment steadily increases from year to year makes the solution of the employment problem a kind of sharp-shooting on a moving target, though predictable. For each year that passes, a larger volume of employment is needed in order to maintain a constant rate of employment. The longer we put off expanding the actual employment, the greater an expansion will be needed.

The stability in the growth of the human capital is a benign phenomenon, since it makes our prognoses of the future potential volume of employment relatively simple and simple and reliable. Thus, we may predict, with a fairly high degree of precision, the size of the potential volume of employment ten or fifteen years hence. This is a precious advantage, since it makes possible a *quantification* of the measures needed to solve the employment problem.

¹⁹ Moreover, it is the best possible confirmation of our theories. If there were any serious errors in any part of the theory, the potential employment curve would be much rougher.

²⁰ By "normal circumstances" should be understood that no major disasters (like war, famine or natural catastrophes) occur, which radically change the size of the population or the average knowledge level of the citizens.

4. Real economy conditions for economic expansion

The domestic product consists of paid activity – it *is* income-creating *activity transactions*. For such transactions to be effected, it is required that somebody *demand*s the activities. Somebody must pay for the work for somebody else to be paid. That is how simple it is. Demand is the *immediate cause* of the domestic product. If there is no demand for the service under consideration, that service will simply not come about.

Take a haircut for example. It does not arise from the hairdresser cutting thin air with his scissors. A customer demanding the haircut is required if it is to be brought about at all. And the number of haircuts is not a constant, nor is it given by any "structural" factors. When you enter the drop-in hairdresser's and take your seat in that chair, the number of haircuts performed will increase, and this is thanks to your demand.

Haircuts are certainly not a unique example. If you go to a restaurant, another meal is prepared as a consequence of you order; if you contact an architect's office, they will make another blueprint at your demand, etc. The quantity of services actually carried out depends directly on how much is in demand. Not even in the so-called goods production will any activities occur unless there is a demand for them.

All activities in the domestic product are services. Some kinds of services render *durable consequences*, in the shape of object that persist over time. Of course, the durability varies. Building or refrigerators stand much longer than ground meat or ice-cream. Objects expected to endure longer than one period of account (usually one year) are called *capital objects*, and the creation of them is called *capital formation*, or *investment*. Goods that perish within one accounting period are called *consumption goods*.

The production of goods – whether they are consumption or capital goods – nevertheless consists of activities. The domestic product is not the heap of TV sets, leather sofas, passenger cars, and washing machines that some people seem to believe, but the *flow* of paid activities which – among many other things – create that kind of goods.

The lion's share of the domestic product, about three quarters, does not create any goods at all. If those activities are added to the production of consumption goods, *consumption* is obtained. Thus, consumption is a particular, but certainly not unusual, kind of paid activity. During our period of inquiry, 1963–1993, consumption made up between 79 and 98 percent of the domestic product, averaging at 87 percent. These figures as such reveal that consumption is the by far most important component of our economic activities – in fact, it is the prime mover of all economies.

The distinction between the activities *per se*, and their material consequences may appear subtle, but in fact it is decisive. Often arguments are heard, concerning the wealth of nations, that seem to be built on the notion that the domestic product is a kind of "cake", which we can eat or keep. If we eat too voraciously of that "cake", if we consume too much that is, there will be too little left for tomorrow (or to our "grandchildren", who are often used in this way to emphasise the moral value of saving the cake).

The shortcoming of this way of reasoning is that the domestic product is not a "cake" at all. Certainly activities may easily be mixed up with their consequences, or with their *value* as expressed in terms of money – the *primary income* created by activity transactions. From a private economy perspective, an income is a sum of money, which can either be spent ("consumed") or saved as long as one wishes. But such is not the case with the domestic product. Activities cannot be stored. It is impossible to "save" the domestic product.

The domestic product consists of millions of activities of thousands of different kinds. Bread-baking is a completely different activity from hair-cutting. Even if both of them should happen to have the same value, as counted in kronor and öre, the bread cannot be turned into a haircut, just as little as the Tower Bridge can be turned into canned tomatoes.

The erroneous train of thought, that the domestic product can be "saved", is both ancient and deeply rooted. It probably emanates from the agricultural era, when the corn had to be distributed between "saving" of planting-seed, and "consumption" of breadstuffs. Actually, this notion is faulty even in this coherence. Man is no sparrow feeding itself by picking corn. The corn must be converted to bread or other foodstuffs in order to be eatable. This conversion requires work and thus constitutes an economic activity – a refinement of the corn to foodstuffs. When that refinement has taken place, the corn will no longer be available for planting – one cannot reasonably sow the land with loaves of bread. Hence, the supposed contradiction between "consumption" and "saving" dissolves.

No such contradiction exists, once we move from the level of the private wallet to the national economy level. Increased consumption is tantamount to a larger economic activity volume and a larger national income. If we consume more, we will not only be richer and better employed, but also richer as a nation. As consumption constitutes nearly the whole of the domestic product, one realises how *extremely dangerous and damaging* that the erroneous metaphor of the "cake" is. It leads to a hostility towards consumption, and to a misdirected thrift, which contributes to *shrink* the domestic product and *lower* our aggregate incomes. The alleged virtue to be careful with one's pennies will, if strictly applied, lead to widespread misery.

Stinginess has been regarded a sin for thousands of years, and not without reason. The skinflint gratefully accepts the income he gets when others spend, but he reciprocates no employment. If all were to act that way, the national economy would break down. Of course, the disposition and the passing fancies of the individual is of little significance to the whole. The stingy are balanced by the extravagant, and in between we find an entire spectrum of sobriety. This distribution of characteristic traits contribute to give the private part of the economy a natural balance. The State, on the contrary, has much more powerful means to affect the economy as a whole. That is why it is disastrous to have the country ruled by inveterate misers.

Every income rests on an expenditure. From the national economy point of view, the real virtue is to spend, to create plenty of work and income. But our small household budgets can never become an effective instrument to achieve higher employment. True, it would help a lot if all *jointly* would increase their expenditure, but the trouble is that we, as private citizens, lack the *instruments* required to establish that kind of co-ordination.

One of the foremost reasons to uphold the State and all our municipalities are their function as *institutions* to co-ordinate and regulate the level of the economic activity flow. When the economic activity is lower than desired, the *State and the municipalities ought to increase their expenditure on economic activities*, that is increase the government consumption or the government investment, or both. In that way the domestic product and the national income will increase.

The opening income increase will be multiplied when the private households and companies spend the new income between themselves. Thanks to these *multiplier effects*, the domestic product and the national income will increase *much more* than the demand "injection" first given by the public sector. Moreover, the increase in national income also implies an *enlarged tax base*. Even if tax rates are kept unchanged, the tax revenue will increase as the economic expansion gathers momentum. As we shall see later, the multiplier effects are large enough for an increase in government demand to rapidly bring about a *surplus* in the government budget. In other words, there are not even any fiscal reasons to allow the stingy to play havoc at the government finance rudder. Here, if anywhere, it holds true that "penny wise pound foolish".

All activity transactions create primary income. It does not matter who is forking out, and for what purpose – every penny spent on activities becomes a primary income penny to somebody, and part of the value of the domestic product. The size of the domestic product as a

whole is a result of all individual and collective decisions to spend on activities, *the aggregate demand*.

Even though all demand works equally in creating domestic product and primary income, the aggregate demand must be subdivided into categories for economic *analysis* of the employment problem. Such a subdivision can be made in many different ways, but chiefly according to who pays the piper, or the purpose of the expenditure.

Obviously, the public sector has an important regulating function with regard to the overall economic activity level. In comparison with the State and the municipalities, private households and enterprises clearly play a secondary role. Thus, private–public is a useful distinction as to the *domestic* economy. Besides the domestic agents, *foreign countries* play an important role. Sweden is a rather small country, and therefore our economy is to highly (though not "extremely", as claimed daily) dependent on foreign trade.

Foreign trade in economic activities involves that part of the aggregate demand in Sweden "leaks out" to other countries in the form of imports. These leakages create employment and domestic product for our trading partners. Few economic phenomena should be more well-known than this, as it is always emphasised by the misanthropes who "set the tune" among the economists. "It will all spill out as imports"; "We must not let all the heat go up the chimney – to the benefit of the crows", that same old story is always to be heard whenever somebody pleads economic expansion.

But no national chimney is completely tight (with the possible exception of North Korea – if that is much of an example), and thus the leakage is not a question of kind, but a question of degree. *The fact that* part of our domestic demand does leak out, is neither surprising nor very interesting. The interesting and important question is *how much* of a domestic demand increase will be directed towards imports.

We should also bear in mind that the "crows" we fire for are in the first place our nearest neighbouring countries, as well as our foremost trading partners (or "competitor countries", as our neo-conquistadors prefer to call them). Our spilt heat contributes to make life a little warmer, speaking in employment terms, in Denmark, Finland, Norway and Germany. To begrudge our neighbours the import demand we provide them with does not seem very well-reasoned, and this is particularly so since we are so happy about theirs.

In the same way as our imports are other countries' exports, our exports are other countries imports. If we reduce our imports below our exports, we act like the stingy. We absorb more of the international market than we provide. A good balance between provision and absorption, between giving and taking, is not least an expression for neighbourly behaviour.

Analytically, the foreign trade implies that exports must be added to the private and public sector consumption and investment activity when computing the aggregate demand. As we just noted, part of that aggregate demand will be directed towards imports, and the remainder to Swedish producers. Thus, in order to calculate the Swedish domestic product, imports must be subtracted from the aggregate demand.²¹

A useful tool for keeping track of the concepts is the *aggregate demand–supply balance*. It is an ordinary T-account, with credit entries in the left column and debit entries in the right one. On the debit side, domestic private demand (private consumption and investment), domestic government demand (public consumption and investment), and exports are recorded. The column total shows the aggregate demand.

Domestic activity (domestic product) and imports are recorded on the credit side. That column sums up to the *aggregate supply*, corresponding to the aggregate demand. In a T-account, the sum of the left and the right columns always add up to exactly the same amount, the

²¹ The domestic product measures all activation of human capital in Sweden. Since our interest primarily lies in the activation of the *domestic* human capital, we must also take into consideration the cross-border labour exchange. Therefore we have added the net imports of labour.

turnover. In the aggregate demand–supply balance, this means that the turnover = aggregate supply = aggregate demand.

Supply	Demand
Domestic activity	Domestic private demand
Imports	Domestic government demand
	Exports
Aggregate supply	Aggregate demand

Table 4.1. The aggregate demand–supply balance.

In order to form an idea of the size-relations between the different entries of the aggregate demand–supply balance, it is graphically displayed for the period 1963–1993 in diagram 4.1. The left-hand panel of the diagram shows the supply side, and the right-hand panel the demand side. At every point in time it holds true that aggregate demand = aggregate supply, which means that the two graphs are of the same height.²² Turnover has increased trend-wise over time, as aggregate demand has grown. Over the period 1963–1993 as a whole, it has more than doubled.

²² Due to the need to link several index series with different base years, a small statistical discrepancy occurs, too small, however, for the eye to discern.

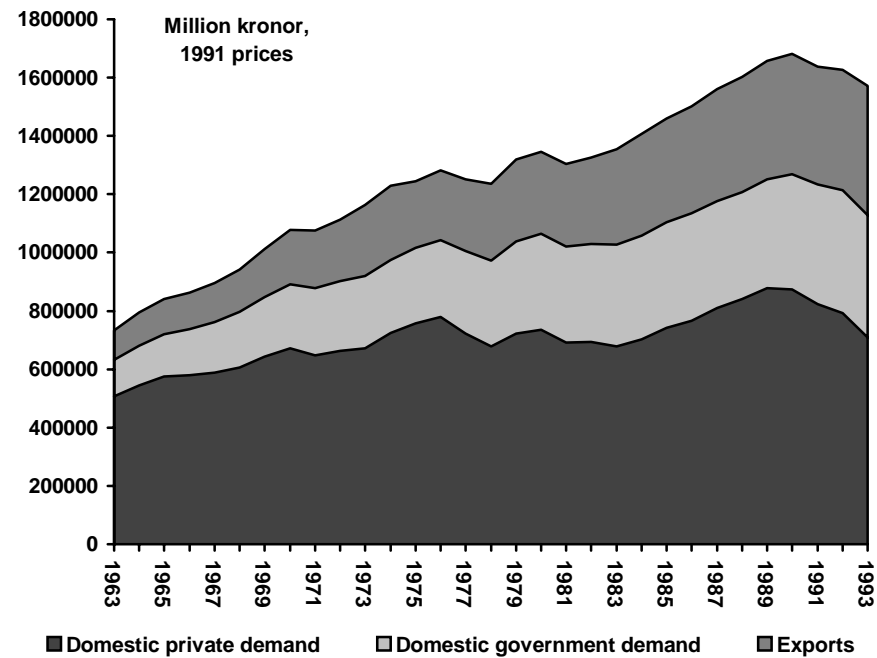
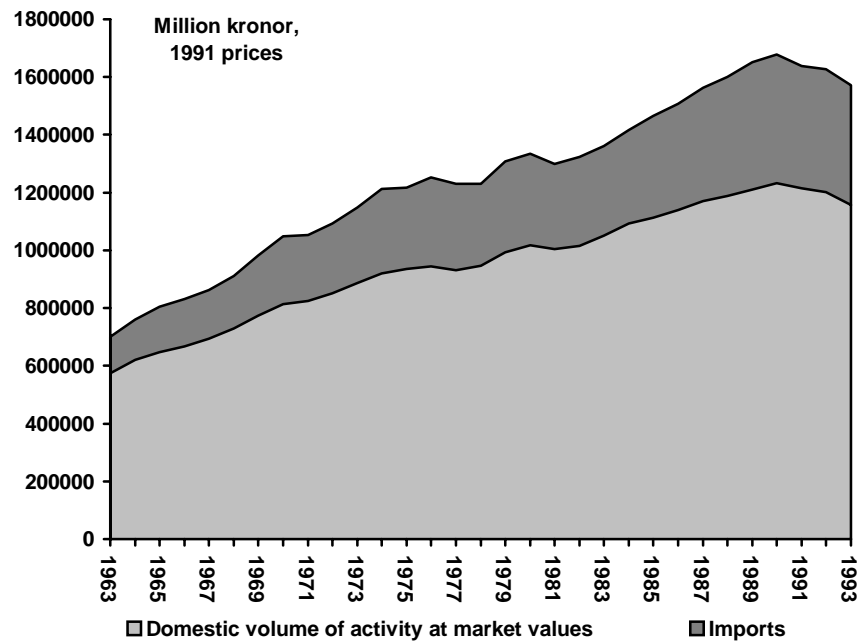


Diagram 7. Aggregate demand and supply components 1963–1993.
 Source: Statistics Sweden, National Accounts, and own adaptations and calculations.

The aggregate demand is dominated by domestic private demand, meaning private consumption and capital formation. This dominance is above all purely quantitative: the domestic private demand has been by far the largest slice of the aggregate demand pie during the whole period of 1963–1993. But even though it is still the largest, its share has decreased dramatically over the years. In 1963 it represented than 72.6 percent of the aggregate demand, in 1993 only 45.1 percent – a decrease of no less than 27.5 percentage points in 30 years.

This dramatic decrease is due to the domestic private demand increasing extremely slowly. During this 30-year period as a whole, the average increase was of a mere 1.1 percent per year, which should be compared with the increase in aggregate demand of 2.7 percent per annum on average. When the largest demand component develops this poorly, it is not surprising that economy on the whole is growing badly. In this sense the development of domestic private demand has been dominating over the development of the economic activity as a whole during this period.

The dominance is also shown in a third respect, namely that the business cycle pattern is ruled by variations in the domestic private demand. This can be seen clearly on the right-hand panel of diagram 4.1. Even if the trend of development differs, all the bulges and declines in aggregate demand coincide with a similar unevenness in domestic private demand. Domestic private demand is the main villain in the drama of the business cycle, and for that sake it ought to be kept under strict stabilisation policy surveillance.

Domestic government demand and exports have nearly equal shares in the aggregate demand. These shares have shown an increasing trend over the period and at the same rate as domestic private demand has declined. The government component of aggregate demand was 17.8 percent in 1963 and 26.6 percent in 1993. The annual rate of volume increase was 4.0 percent on average. Thus, the domestic government demand increased almost four times as quickly as the domestic private demand during the 30-year period as a whole.

The increase in the exports' share of the aggregate demand is even bigger than that of the domestic government demand. In 1963, exports represented not more than 14.5 percent of the aggregate demand and in 1993 the figure was 28.3 percent.

On an average the increase of exports was 4.9 percent per annum, almost five times faster than the increase of the domestic private demand.

The same goes for the imports: they increased in volume with an average of 3.9 percent annually between 1963 and 1993. The imports' share of aggregate supply rose from 18.2 percent in 1963 to 26.4 percent in 1993. Just as the domestic private share of aggregate demand has decreased for the benefit of domestic government demand and exports, the share of domestic activity in the aggregate supply has decreased – as a reflection of the increase in the imports' share.

The fact that the foreign trade shares of aggregate demand and supply have increased so much is taken as a pretext for "the internationalisation of the economy", the actual code word for our alleged inability to solve our employment problem – at least as an individual nation. It is particularly the volume of imports that it said to cause trouble, due to the aforementioned problem of leakage. But what do the statistical facts say? Will all the heat be going up the chimney if we were to expand the economy?

In order to answer that question, the aggregate demand–supply balance is an indispensable tool. It does not only express a national accounting identity – what to add and subtract when computing the domestic product – but also a basic causal relation.

The volume of activities performed – the aggregate supply – depends entirely on how much activity that is demanded. That is why the turnover of the demand side of the balance determines the turnover of the supply side, and not the other way around. You could say that *demand creates its own supply*, either through domestic production or through imports of foreign products.

The aggregate demand is spontaneously distributed between the two different parts on the supply side. How much activity is performed within the country, and how much is imported, is chiefly determined by the level of aggregate demand. The larger the aggregate demand, the larger both the domestic product and the level of imports, that is the main rule.

With statistical methods it is possible to distinguish the effects that different factors have upon the volume of imports. The result of such an analysis is shown in table 4.2.

Causal factor	Effects on the volume of imports
Domestic private demand	0.336
Domestic government demand	0.154
Exports	0.513

Table 4.2. Effects on the volume of imports if the respective demand component is raised by one krona (in 1991 prices).²³

The "effects on the volume of imports" column show how much the volume of imports increases when the item of demand in question increases by one krona. As shown in Table 4.2, the effect of the volume of private, domestic demand is 33.6 öre. For the public, domestic demand it is 15.4 öre and for the export 51.3 öre. These figures, of course, are not exact, but a margin of error should be added.

The import leakage differs between the different demand components. Roughly speaking, an increase of domestic private demand is twice as import-demanding as an increase of domestic government demand, and export demand is more than three times as import-demanding.

The part of the increase of demand that is *not* imported leads to an increase in domestic activity. By simple subtraction, we obtain 66.4 öre for domestic private demand, 84.6 öre for domestic government demand and 48.7 öre for the exports. The claim that "it will all spill out as imports" is a gross exaggeration. Even if only the private part of domestic demand is increased, two thirds of the increase in expenditure will stay within the country and activate the domestic human capital. If the expansion is exclusively in government demand, the share is as large as five-sixths, and every combination of private and government demand expansion must result somewhere in between.

These import-coefficients are admittedly not very low, but on the other hand they are not "extremely" high either. Compared with other industrial countries, Sweden actually has a surprisingly low propensity to import. It is true that the biggest industrial countries – the USA and Japan – have much lower propensities to import, which can be explained by purely geographical and demographical factors. But if we compare with the European countries with the same population size, Sweden shows low figures. Our import figures are rather more like those of the big European countries – France, Germany and Great Britain – than those of Denmark, Norway, the Netherlands, Belgium and Austria.

We are therefore well prepared for carrying through a "one-sided" Swedish demand expansion, in order to improve the Swedish employment situation. A co-ordinated Nordic, European or an international expansion is of course to be preferred, since it increases our possibilities to export. But nothing in our import figures states that we are forced to keep the

²³ Linear multiple OLS regression. The standard errors of the coefficients are 0.027; 0.072; and 0.062, respectively. $R^2 = 99,6\%$. If imports are endeared, the demand will to some extent be redirected from imports to domestic production, and vice versa if imports get cheaper. For this reason the price relation between imports and domestic supply has been used as a supporting explanatory variable in the model.

demand down on home ground. This does not imply, however, that the leakage problem can be neglected. If we increase the demand, the import will increase, and the increased import must be financed – with foreign loans and by increased export.

Today borrowing abroad is no problem, since we have a *surplus* on the current account with the rest of the world. Therefore an expansion can be financed – at least in the beginning – by a reduction of our net lending to foreign countries. But even though the surplus is large, it is not large enough to cover the gigantic expansion that is needed in order to increase the rate of employment from today's 75 percent to 100 percent.

When the surplus on the current account has been "used up", we must either borrow more than we lend, or increase our exports, in order to finance the increasing imports. There is no reason for excluding prematurely the method of borrowing from foreign countries. On the contrary, such loans can prove very profitable, provided that the means are spent on projects that yield better returns than the interest cost of the loan.

Borrowing for investments – at least for those that seem profitable – is quite accepted as good economy, even by the dogmas of conventional wisdom. Borrowing for consumption, on the other hand, is considered as irresponsible. These dress codes may function as good guiding principles for the private economy, but they are of very little use when it comes to the national economy. As we have seen, there is no conflict between consumption and saving on the national level of the economy. On the contrary, they walk hand in hand: the more we consume, the more we save.

This apparent impossibility is called the *paradox of thrift*. The solution of this paradox comes with the recognition that the domestic product consists of paid activities. The greater the aggregate demand, the larger the volume of activity, and the higher the national income. And the national income is the source from which both the consumption and the saving have to be financed. It goes without saying that a big national income allows free scope for a high level of consumption *as well as* for a high level of saving.

The wealth of nations is founded on hard labour and laborious saving, just like private wealth ought to be. So far the conventional wisdom is indisputably right. But hard labour requires hard spending, and laborious saving presupposes high income from which to save, which in its turn presupposes high expenses. The economy of a nation is a *circuit* of payments – the money circulates, and the expenditure of one becomes the income of another. Full employment can only be reached if this money-go-round of paid activity has enough speed.

Just as little as consumption and saving stand in mutual contradiction, consumption and investment do. Investment is, as was noted in the previous chapter, an *active saving*, consisting of purchases of activities that create durable capital objects. Investment constitutes a (minor) part of the aggregate, and thus it contributes, in the same fashion as all other demand, to increase the economic activity.

The delimitation of what should, and should not, be considered as "capital", is founded on conventions. Matters of civil law, *e.g.* of what can be distress levied by the bank or the executory at bankruptcy, largely lie behind the conventions. In particular, material objects with a second-hand value are counted as capital. More recently, immaterial objects like "good-will" and patent rights have been added to the category of capital.

In the book-keeping of companies, capital accounts are set up to record the acquisition, sales, scrapping and depreciation of capital. Similarly, the creation of material *real capital* is recorded as investment in the national accounts. But the investment in the by far most important kind of capital is nowhere to be found in the books. This is partly for technical reasons: how should knowledge, which is personal and inalienable, be valued? The absence of market value does however not imply that this capital does not *exist*, but only that its value is not *recorded* in the books.

Book-keeping and budgeting are no doubt ingenious inventions, by the aid of which our economies have developed from primitive barter to modern credit-based trade. Book-keeping and credit go hand in hand, and credit-giving is the mother of economic expansion. Still one must realise that there are limitations to the system of book-keeping and budgeting. All the joys of life do not appear as credit items in the books, nor does Old Harry necessarily dwell on the debit side.

Book-keeping is like a map over the economic landscape, and the budget a planned route. If the map and the terrain are in accordance, these instruments are splendid, but if the map is misleading, things may go seriously wrong. The capital accounts of today resemble a 17:th Century map over Africa. Most of the continent of capital shows as empty rows and void columns. If such an inadequate book-keeping is laid as the sole ground for decision-making, then the decisions are bound to go astray. If this blindman's-buffery is combined with an overdose of conventional wisdom, disaster is never far away.

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The partitioning of demand into consumption and investment demand is conventionally, rather than rationally, based. For this reason, one must be careful not to put too much emphasis on that distinction. It is not possible to draw any safe conclusions as to which activities are good or bad, by guidance of the distinction between consumption and investment.

It is widely argued that we should "invest for the future" rather than "use up the resources in consumption". But the partitioning of economic activity into consumption and investment does not say a thing about what is "good for the future". Education, for example, is recorded as consumption, while the acquisition of new beer-taps at the pub is investment. Which of the two is the better for the future?

Already for this reason, the restriction of borrowing for investment purposes only is futile, not to say foolish. Apart from these objections by principle, there are also critical practical reasons: Borrowed money is not ear-marked. Money does not smell, they may be used to anything. There is no way we can judge whether a penny borrowed abroad is "spent on consumption" or "used to investment". Nor is it very interesting to try drawing such a demarcation line.

The truly interesting matter is how the wealth of the nation is affected by borrowing. Current account deficits imply a growing foreign debt, but a growing foreign debt is no problem as such. Despite what many people believe, the foreign debt does not need to be amortised. The faulty notion of amortising grandchildren once again builds on false analogies between the private and the national economy. A physical person must repay his loans simply because human beings of flesh and blood will expire sooner or later. A nation does not cease. Foreign debt is "rolled over" by the continuous renewal of loans that fall due to payment. The problem is never the debt, but the *interest payment* on that debt.

Of course, the interest payments are only an insignificant fraction of the debt itself. This rivulet can easily be financed if only the national income increases. An expansion of the domestic demand will lead to increased imports. But thanks to the fact that only a minor part of the domestic demand increase is imported, the national income will increase *much more* than external borrowing. And the increase of the "interest burden" towards the rest of the world is, to repeat, only an insignificant fraction of this borrowing. The capacity to carry the burden – the national income – increases *many times more* than the burden itself.

Therefore, we can safely finance the increase in imports, which follows upon a domestic expansion, by borrowing abroad. It is not until the expansion ceases that we must carefully consider our foreign liabilities. We must remember that the restoration of full employment is a

limited, if colossal, mission. When the desired rate of employment (say, 100 percent) has been reached, we must go back from the extraordinary expansion phase to a more quiet, steady increase of the domestic product and employment, just enough to match the spontaneous growth of the human capital.

When the expansion levels away, we must make sure that the exports are sufficiently large to finance the permanently high imports in all essentials. If we should neglect the export development completely during the expansion phase, the strains will be great at the phase-out. An historical example of what might happen is Britain's weak economic development after World War Two.

By means of the "lend-lease"-agreement, the British financed the extraordinarily increase in activity during the war by borrowing from the USA in particular. At times, the exports were not even financing one quarter of the abundant imports of munitions. At the end of the war, Britain had accumulated a very large foreign debt (even if lent on favourable terms) and a very small export industry. The build-up of the exports was dampened by the restrictions of the international payments system at that time (the Bretton Woods system), a drag which is no longer there, but which has been replaced by the strong speculative forces of the deregulated payments system of today.

From the hard-earned experience of the British we should learn that the exports must always be cared for to the T, which, however, does not imply that we should not borrow abroad, but that we should promote exports also during the expansion phase, to make sure that it is not far too small when the phase-out comes on. Of course, the most important we have to learn from the British is that it is way better to fight unemployment today than to wage war against a new Hitler tomorrow.

We have already seen how a domestic expansion can be brought about by increased public spending, and we will soon return to how this is done in greater detail. Public expenditure is controlled by the government and the parliament, by the central bank and by all the local councils. That far, domestic expansion is primarily a question of producing a political conviction which unfortunately is not there today. But to increase the *exports* – how could that be done? After all, we can hardly *force* our dear "crow" neighbours to buy more Made in Sweden.

In today's discussions of "incentives", the stick – in all its economic forms – seems to be by far the most popular instrument. The carrot has been put in the shade. But the carrot is, and for this we should count ourselves lucky, the only tool at our disposal to lure the rest of the world to import more Swedish products. Still many of our leading decision-makers seem firmly convinced to dispose of that carrot.

During the last twenty years, we have made frequent use of *devaluations*. By devaluing the krona, we make Swedish products cheaper in relation to foreign goods and services. This leads both to a reduction of imports, and to an increase of exports. The advantage of devaluation is that we thereby attract more international demand, which increases activity in the Swedish economy.

This advantage to the devaluing country is often considered a disadvantage to its trade partners. If we lower the prices of Swedish products, thereby gaining market shares, our trading partners will see their exports endeared and their market shares shrinking, which might be taken for bad neighbourhood. Thus goes the argument. But it is not true. Neither the size of the domestic market nor the international market is an exogenously given constant. The markets grow when there is an increasing demand and shrink when the demand decreases. In world trade it is the *import demand* that creates a market, just as the *export supply* absorbs the market space.

As long as a country imports at least as much as it exports, it creates more market space than it absorbs. Whether the country sells its products dearly or cheaply, abundantly or sparingly, does not really matter. Neighbourliness is upheld by the balance between the giving

and the taking of market space, not by keeping export prices at any particular level. It is completely *comme il faut* to devalue, *provided that the increased income from exports is used to import more*.

The argument of neighbourliness is often appealed to in support of the planned common European currency. This argument is the opposite of the truth. By foisting a common currency upon the European nations, we risk to ruin the fairly neighbourly relations which have characterised Western Europe during the last decades. A common currency definitely rules out individual devaluations. A country suffering from large and growing current account deficits, without being in a phase of expansion, will in practice have no alternative but to bring down the domestic demand, and thereby restore the domestic under-employment.

If the individual countries' possibilities to change the exchange rate of the currency are done away with, only international collaboration remains as a method to bring about employment expansion. Such collaboration is highly desirable, but with the international institutions of today, it is hardly practicable. Take the EU, for example. The budget turnover of the EU amounts to one single percent of the national income of the member states. There are no built-in systems for transferring purchasing power to those regions or countries that are struck by mass unemployment and economic depression. There are not even any *plans* for a fiscal system of a nation-state type for the EU as a whole.

Introducing a common currency without *first* establishing the institutions needed to fight economic depressions, that is truly playing with fire. There is no readiness whatsoever to intervene, if something should go wrong in terms of employment, and there is no emergency exit out of the crisis for the individual country. The consequences of the European Monetary Union, the way it is planned to be carried out, could be *very severe*.

Stopping the present plans for a common European currency is the *most important question by far* on the economic policy agenda. A national currency, and the possibility of devaluing that comes with it, is in practice a *sine qua non* for expanding the domestic economy and decreasing under-employment. If the insane project called EMU is carried through, we deprive ourselves – just like all other EU countries – of all practical possibilities to carry through an expansionary policy of our own.

This is not to say that devaluations are problem-free. A devaluation creates *domestic problems of income distribution* that are really distressing. When a devaluation takes place, the prices of imports rise, which lowers the real wages. If this effect is not compensated for, by *e.g.* a lowering of the VAT, in order to keep the purchasing power intact, there is a risk of getting rapid money wage increases in the wake of the devaluation. This actually happened every time that Sweden devaluated, with the exception of the currency slide in 1992, when the real wage decrease walked hand in hand with a collapse in the employment rate.

What causes surprise, is that every time a devaluation has been brought about, the ensuing inflationary impulse has been taken for a sign of "overheating". It is part of the common wisdom that "overheating" should be fought by belt-tightening. But often, the method chosen to tighten the belt has been to raise the VAT or other specific taxes, directly forcing prices up even further! The inflationary fire, initiated by devaluation, is thus maintained by the pouring of VAT-hike petrol. Then it is peremptorily proclaimed, like former finance minister Kjell-Olof Feldt did, that one "does not sleep well at night" due to one's inflation phobia, but that "resolute and responsible measures" are taken for the "aftercare" of the devaluation!

The aftercare of a devaluation is no doubt important. It should consist of political decisions decreasing the costs of living, at least to the same extent that the devaluation increases them. By keeping real wages and the domestic purchasing power intact, it is possible to take the full gain from the expansionary effects of the devaluation, without getting caught in the inflationary spiral.

There is nothing in the facts we have examined about the proportions of the foreign trade and the import leakages that speaks against a "one-sided" Swedish domestic demand expansion in order to restore full employment. Sweden can and should act offensively to raise the domestic demand until the employment rate has reached the level sought for. The increase of imports, which will be the inevitable result of the expansion, can and must mainly be financed by foreign loans, especially in the initial phase of the expansion. In the latter part of the expansion we should whole-heartedly go for an expansion of exports by keeping a low enough exchange rate of the krona. This presupposes that we *keep the Swedish currency and the possibility of devaluating when needed*.

Such appears, roughly speaking, the *real-economy* conditions for a Swedish employment expansion, as to the foreign trade. Over and above the real economy conditions, the financial caveats must be met. It must be practically feasible to borrow the required means on the international credit market, to regulate the value of the currency, and to simultaneously maintain stability on the domestic credit markets. We shall leave these financial questions until the next chapter. The remainder of this chapter we shall devote to the analysis of the *domestic* real-economy conditions for restoring full employment.

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From the aggregate demand–supply balance displayed in diagram 4.1, we concluded that the low growth rate of the Swedish economy primarily originates from the weak development of the *domestic private demand*. Therefore, the domestic demand expansion should mainly lie with the private side, not with the government.

This is not to say that government demand should be kept low. We have large and growing needs for government services, and those needs should be met by a gradually increasing level of government activity. There is no contradictory relation between the private and the public sector activity volume. We have plenty of economic room to expand *both* the private and the government demand.

There are several different methods by which to stimulate private demand. A well-tried means is to devalue, another is to lower taxes, a third is to raise government transfers to the households, and a fourth is to increase the government demand. They all work in the same direction: they raise the domestic private demand in an *indirect* way, by supplying the means and encouraging the households to increase their demand. There are no *direct* ways to increase the domestic private demand. It is hardly suitable to *force* the households and the enterprises to spend on certain activities. Instead, the compulsory expenditures are channelled through the budgets of the State and the municipalities.

Even though the different methods to increase private demand work in the same direction, they are not equally *effective*. Of the four stimulation methods mentioned, two may be counted out right from the start, due to their relatively low efficiency, namely lowered taxes and raised transfers.²⁴ Thus remains devaluation and increased government demand.

It is very hard to predict how large an impact a devaluation of a particular percentage has on the domestic product and the rate of employment. This is so, because the export volume not only depends on the Swedish cost level, but also on the state of the international markets. On the other hand, the total impact that a certain *volume increase* of the exports – regardless of what brought it about – is likely to have on the domestic product, may be comparatively easily predicted, as may the effects of an increased domestic government demand.

²⁴ We omit the proof why tax reductions and increased transfers are always less efficient than an increase in government demand. It is part of any elementary economics course and as such it can be taken for granted in our context.

But what is it that determines the efficiency of a particular stimulation measure? The economy of a national is a web – not to say a skein – of transactions, wherein the one part always affects the other. When analysing the national economy, as distinct from the private economy, one must never overlook the interdependence. For this reason, we must spend some energy on the question how to systematise and analyse the interdependencies.

The aggregate demand–supply balance records all income-creating activity transactions taking place in the economy. Consumption demand is part of the aggregate demand–supply balance. Every earned penny that is spent on consumption will be recycled and thus creates employment and primary income. The same applies to investment demand. Investment is *active saving*, that is purchases of capital-forming activities. Each penny spent on investment contributes, just like the consumption demand, to the domestic product and the primary incomes.

But all saving does not take place actively. The *passive* saving, *i.e.* acquisitions of securities, of real estate or other "second-hand" objects, do not contribute in any immediate way to the domestic product, employment and primary incomes. This relation is *extremely important*, because it implies that *there is no automatic feedback from the aggregate disposable income to the aggregate demand*. The option to save passively explains why all disposable incomes do not necessarily need to give rise to an equally large demand for activities.

The disposable incomes are the result of the *distribution* of primary incomes. Suppose we were living in a closed economy, with no foreign transactions. In such a system, the total of all disposable incomes must be exactly equal to the primary incomes sum – somebody must receive what is being distributed. Also suppose that savings only be made actively. In that case, every primary income would automatically give rise to exactly the same amount of primary demand: The primary incomes that are distributed will be used in their entirety to consumption and investment (active savings) demand. No part of the created income sum would be wasted – the circuit is closed.

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The astonishing fact is that such a fictitious system would collapse immediately! This is so, because it lacks built-in stability. If anybody should take the initiative to spend one single penny on an economic activity, another penny of demand is immediately created. This takes place automatically, since all disposable incomes are spent actively. This second demand penny, in turn, gives rise to a third income penny, and so on. The process would continue immediately and explosively, much like the fission of a nuclear bomb. The economic activity level can simply not be stabilised in such an imagined system, and that is precisely why no such system is to be found in the external world.

The fact that the real-world economies cannot function along these lines, does not worry some economists much. The *neoclassical* economic theory is based on the erroneous notion that incomes automatically create the same amount of demand. The entertainment of this notion may be excused as an intellectual pastime. But when it is attempted, as has often been the case in recent years, to give practical advice on the basis of these misconceptions, outright devastation of the national economy is risked.

The real-world economies are no nuclear bombs. They rather resemble a nuclear power plant in their functioning. In the same way as the chain reaction of the nuclear fission, the active demand of one creates the income of the other, and this income in turn stimulates new active demand and new primary income. Thus, there is a *feedback* from incomes to demand, much in the same fashion as the fission creates new neutrons, which splits up another atom's nucleus, and so on. In the real-world economies, like in nuclear power plants, the feedback is *damped*. In a market economy, this dampening takes places by passive saving.

Passive saving work like an *inner leakage* of demand. The national income must be at the level which equilibrates the demand and supply of passive savings. This principle is the core of Keynes's *Principle of Effective Demand*, and the foundation of all relevant economic theory of employment. The level of aggregate demand, and hence the volume of employment and the national income, are determined by the balance between demand for, and supply of, passive savings. The particular level of aggregate demand, which is associated with such an equilibrium, is called the *effective demand*.

Effective demand can be regulated by an active *fiscal policy*, that is political decisions which change the government *budget balance*. The budget balance is the public sector's passive savings towards other sectors. If the balance is negative, a budget deficit is at hand, and this means that the public sector is selling more objects of passive saving (primarily treasury bonds) than it buys.

An expansionary fiscal policy consists of *actively increasing the budget deficit* (or reducing the surplus). In that way, the supply of passive savings is *increased* (or the demand is *reduced*), by offering more treasury bonds and other financial instruments for sale. For this increased supply to be absorbed, the economic activity level and the national income must rise enough to enable and lure the private sector to absorb the whole of the budget deficit increase.

Thus the effective demand is stimulated by an expansionary fiscal policy. The principle also works, as our later finance ministers have been keen on demonstrating, in the opposite direction. By a contractionary fiscal policy, actively diminishing the budget deficit (or increasing the surplus), the effective demand is suffocated, with the consequence that the volume of employment and the national income is reduced.

The principle of effective demand applies to the open economy as well as to the closed. In both cases, and expansionary fiscal policy will lead to an increased effective demand.

The differences between a closed system (the world economy, *i.e.* that we do not trade with outer space) and an open system (the Swedish economy) are chiefly of a practical kind. It is important to acknowledge, however, that an increase in the domestic demand has a *much larger effect* on the domestic Swedish activity level, and our volume of employment, than has an increase of the export demand.

It is perfectly true that an export demand increase renders a positive effect on the domestic activity, even after the ensuing import leakages has been discounted. But at the same time there is an *increase* in passive saving due to the export increase. By this channel, the domestic demand is dampened, deadening part of the expansionary effect. The import leakage has the opposite impact: passive saving is *reduced*, which stimulates the domestic activity.

A domestic demand increase, on the other hand, does not as such affect the exports. Only the domestic activity and the imports are affected. The import leakage, which is so frequently perceived as a problem, will also imply *reduced* passive saving, which will stimulate the domestic activity still further. Since the exports are not affected by a domestic demand expansion, the passive saving increase, which is entailed by an export increase, falls off. Thus, those activity-hampering effects are evaded.

As we can see, a number of relations are active at the same time, pulling and pushing in different directions with different forces. Even if we may conclude by reasoning that an expansion of the domestic government demand is the most efficient way to raise the rate of employment, the dosage of the measures requires *quantification* of the relations. For that purpose, we must estimate the size of the feedback effects of the economy, that is how much the domestic private demand is affected by changes in the other entries of the aggregate demand–supply balance.

The estimation is similar to that of the import leakage. We set up a balance in the shape of a T-account, and apply statistical methods to determine how the changes in domestic activity

(national income), imports and exports, respectively, correlate with the changes in the domestic private demand.

As is shown in table 4.3, domestic private and government demand remain in the right-hand column. Against that column stands the *domestic supply* of the left column. Domestic supply consists of domestic activity and *net imports* (imports less exports).

Domestic supply	Domestic demand
Domestic activity	Domestic private demand
Imports	Domestic government demand
–Exports	
Aggregate domestic supply	Aggregate domestic demand

Table 4.3. Balance for income–demand feedback analysis.

The direction of the feedback effects goes from the supply side to the demand side, that is the opposite direction compared to our earlier estimation of the import coefficients. The reversed direction does of course not shake the principle of demand creating its own supply. The overall direction of causality goes from the right-hand to the left-hand side of the aggregate demand–supply balance. At this point, we are only estimating the extent of the recycling of ”injections” of fresh demand.

Domestic supply component	Effect on the domestic private demand
Domestic activity volume (national income)	0.571
Imports	1.602
–Exports	1.022

Table 4.4. Changes in the volume of domestic private demand caused by an increase of the domestic supply components by one krona (in 1991 prices).²⁵

The feedback effect of an increase in the domestic activity volume on the domestic private demand is estimated to 57.1 percent²⁶ – that is: out of a one krona increase in national income, 57.1 öre will be recycled as increased private demand. The remaining 42.9 öre make up an internal leakage by passive saving. Of course, these figures are not to be taken as exact, but a margin of error should be added in both directions.

As to the imports, the recycling rate is 1.60 kronor per krona of import. Thus, the reduction of passive savings induces the domestic private demand to increase significantly *more* than the imports as such, in order to restore the domestic balance of saving. The feedback effect

²⁵ Linear multiple OLS regression. The standard errors of the coefficients are 0.070; 0.155; and 0.113, respectively. $R^2 = 99,4\%$. Three supporting explanatory variables have been used: the volume of the real capital stock (cumulated capital formation), the price relation imports–domestic private demand, and the price relation exports–domestic private demand.

²⁶ The only difference it that the algebra is a little more complicated in this case than the simple subtraction of the import analysis.

from a one krona export increase is a 1.02 krona reduction of the domestic private demand. Thus, the financial suffocation effect from the exports is highly significant.

By these feedback coefficients and the previously obtained import coefficients, we can compute how much the domestic activity will increase as a consequence to the one or the other stimulation measure. The computations result in *multipliers*, showing how many times an export increase, or an increase in the government demand, is multiplied through the web of interdependencies and interactions, all leakages and feedbacks included.²⁷

Expansionary component	Multiplier
Domestic government demand	6.72
Exports	1.11

Table 4.5. Multiplier effects on the domestic activity volume caused by an increase of listed demand components by one krona (in 1991 prices).

The result of the computations is shown by table 4.5. A one krona increase of the domestic government demand will, all in all, result in a magnificent 6.72 kronor increase of the domestic activity volume. A one krona export increase, on the other hand, merely induces a 1.11 kronor increase of domestic activity. Thus, the efficiency of government demand as stimulation method is as much as six times larger than that of the exports.

It must be stated clearly that computations of this kind are awkward. In the same manner as the demand is being multiplied through the feedbacks of the economic system, the margins of error also multiply in the computations. Thus, do not take the stated coefficients for being exact, but add a substantial margin of error in each direction.

The size gap between the two multipliers, though, is more than enough for us to safely conclude that the government demand actually is far more efficient than the exports as a method of expansion. Therefore, a well-designed economic policy strategy to restore full employment should at first hand be based on an increased domestic government demand. Export increases are not a very efficient way of solving the employment problem. As was previously argued, export increases will still be necessary, but for other reasons. In a way, an export increase is a regrettable necessity rather than the key to the nation's salvation from the evils of under-employment.

We may also conclude that there is no contradictory relation between the private and the public sector in the domestic economy. An increase of the domestic government demand brings about a *far greater* increase in the domestic private demand. In other words, the problem of slow-growing private demand in the Swedish economy should be solved by a faster public demand growth. Moreover, it is the private sector which takes the hardest hits when government demand is cut back.

The national economy paradoxes are many, and their solutions often push established trains of thought off the track. In this case, the attitude of the traditional political right-left-wing spectrum concerning the public sector fits in very badly with the conclusions of the economic analysis. To pit private enterprise against government services, and consequently prefer one to the other, is not a very good idea if you want to solve the employment problem.

All in all, the real economy conditions for an expansionary policy for full employment are excellent, even if Sweden were the only nation to work along these lines. If we could cooperate with other countries in Scandinavia, the EU, or even globally, so much the better. But

²⁷ In principle, the computations are only elementary linear algebra, but they are voluminous enough to bore the most patient of readers. Therefore we omit them.

why make the best the foe of the good? The obvious thing for Sweden to do is to start expanding on its own, and at the same time plea vigorously, in all proper forums, for an international spreading of the expansion.

The emphasis of the expansion, especially at the beginning of it, should be put on increasing domestic government demand. Exports must increase at a pace sufficiently high for us not to get stuck in an explosive foreign debt-situation when the phase of expansion weakens. During the phase of expansion, however, we should take on large foreign loans.

The financing of the expansion is of crucial importance. Unless the financing question is solved, the expansion is simply not possible to carry through. For this reason, we shall direct the whole of the next chapter to the question of financial technique – "where to get the money".

5. Financial conditions for economic expansion

Our suggested expansion strategy for full employment is based, especially in the opening phase, on an increased domestic government demand and an increased borrowing abroad. This design is motivated by its being particularly effective when it comes to stimulating the domestic activity level and the volume of employment. But is it practicable? How can the domestic government demand be increased? Where do we get the money? Do we have to raise the taxes? And how do we arrange the increased foreign borrowing? How are the financial markets going to react? Will rates of interest sky-rocket? And what about the currency exchange rate?

The first step of the expansion is to increase the domestic government demand. This is basically very easy: the State and the municipalities budget a little more generously, and when these budgets are implemented, the government demand increases. In practice, however, this has never been easy. The firmly rooted conventional wisdom to cut one's coat according to one's cloth has nearly always made impossible the mere thought of carrying through an expansion policy. Not even during the "Keynesian" 1950's and 1960's, this fiscalist view was much shaken.

It is true that government budgets became more abundant year by year during these decades. But the background to this increase in expenditure was not a conscious attempt to expand the economy, but simply that *tax revenue* kept increasing all the time. It is not much of an heroic deed to increase the expenditure when the revenue increases continuously, and the budget yields a good surplus.

But when revenue starts giving way and the budget stands at a deficit, a great deal of fortitude is required to go ahead and briskly raise expenditure. He who tries to argue an increase in borrowing will quickly find himself in the midst of a torrent of abuse, hearing taunts about how "irresponsible" it would be to "mortgage our grandchildren's stock", etc. The middle-aged men who so keenly blow you up, are equally anxious to wallow in their own excellence. They have the sense "to take responsible action" when "refinancing the budget". They have deeper insights into the "painful adjustments" required by the "hard economic reality", and so on.

The language which is used in this so-called debate reveals a lot about what lies at the heart of the matter. The doctrine about "sound finances" is not based on argument, but on pure prejudice. He who questions these prejudices will be treated accordingly. To suggest "mortgaging the stock" is a sure way of making oneself a laughing-stock. This consistent harassment of every hesitant human being from the domains of budget policy is no doubt the main reason why we have this Swedish morass of employment. Thus, this harassment goes on far beyond political parties and congregations. The Swedish people as a whole are deprived of openings, income and self-respect due to this fiscal hooliganism.

Economics is a wonderful intellectual pastime: On the one hand it is filled with paradoxes and unexpected turns – the white rabbits keep coming in a steady stream out of the analytical top-hat. On the other hand it is all consistent and straightforward – a special branch of logic, to quote Keynes. The peculiar and exciting duality may be explained by the national economy largely *sharing the language* of the private economy. The shared language is a blessing to the unconventional tongue-twister, and a curse to the conventional one-string harper. In the national economy, the words often have a radically different meaning compared to the private economy. One must *never* assume that the conventional wisdom of the private economy also will apply as good guiding principles for the national economy.

Budget deficits are, in terms of business economics, tantamount to *losses*. A company that is run at a loss has to take measures – either by acting offensively or by cutting down. This is *not* the way the State, the municipalities and the national economy function. A country as a whole does not "bring in a profit" or run "at a loss" – the words in themselves are wrong.

The national economy should generate employment and income in abundance for the whole population, but not any surplus for the State, the municipalities or a few private individuals.

In a democracy, the government should promote the welfare of the people.

Economically speaking, this task is primarily about regulating the aggregate demand in order to keep the volume of employment and the national income at a permanent full employment level. It is impossible to combine this task with an orthodox, fiscalist attitude to the budget. In this respect, the fiscal orthodoxy also constitutes a serious threat to democracy.

The government must *always* be ready to increase their demand when the employment rate is lower than desired – irrespective of there being a budget deficit or not. An increase of government demand can *always* be financed. The State can never lack money, as long as there is a functioning national central bank – it is the State that regulates the creation and destruction of money in the economy. That is why it is so depressing to hear ministers of the Cabinet officially announce that "there is no more money". The State *can* never run out of money – more can be created whenever necessary. The municipalities, on the other hand, can get into an acute liquidity crisis (a genuine lack of money). This has never happened so far, and as long as the State backs up the municipalities, it will never happen. The liquidity of the municipalities is entirely a matter of what responsibility the State takes on. It is a political issue and has nothing to do with financing techniques.

In the distorted use of language, the word "financing" has become synonymous with *tax revenue*. But finance and tax revenue are two different things. Expenditure that cannot be financed by taxes can always be financed by loans. Financing public expenses is *never* – and this deserves to be repeated – a problem in itself. But if this is so, why collect any taxes at all? This question might look absurd at first sight, but in fact it is highly justified. The thing is that the role of taxes in the national economy is gravely misunderstood by nearly all public decision-makers and debaters.

The main task of taxation, or more correctly, of public revenue (the State, the municipalities and the social security sector also have other sources of income than taxes), is to *withdraw private purchasing power*. If the public income were zero, then all primary income would be distributed to private households, companies and (to some extent) abroad. The public revenue drains this income flow and thereby weakens private purchasing power.

This drainage is only justified insofar as private purchasing power needs to be moderated. The main reason for collecting taxes is to stop the private economic activities from running amok, *not* to "finance" public expenses.

This principle should not be taken to justify an unrestrained shovelling of borrowed, public money into the private sector. There are some very important drawbacks, which however do not influence the main principle. The most important objection is that *taxes tend to create inflation*. There are people who claim that the creation of money (which can, but does not have to be the result of a government budget deficit) increases inflation according to the motto "too much money chasing too few goods". However, this notion is incorrect.

An increased aggregate demand does not primarily increase inflation, but the *activity* of the economy.²⁸ A lasting inflation presupposes a *feedback* between prices and wages, a "wage–price spiral", where wages and prices rise simultaneously and where they influence each other. If money-wages do not get higher, then there will be no wage–price spiral and in that case inflation can be neither lasting nor high.

In chapter 3, we carefully analysed the money-wage increases, and found that their cause was to be found in *real wages being too low*. A higher rate of economic activity and employment must be accompanied by increasing real wages, in order to avoid an acceleration

²⁸ It is true that the demand increase will produce an impulse to price increases, by the companies raising their margins. But this is more than counterweighted by the companies' ability to lower their costs per unit of output when the capacity is used more intensively.

of money-wages. Increases in taxation which hit the wage-earners (income taxes, VAT, and other specific taxes) *lower real wages*, and thereby contribute to fuel the money-wage increases.

In this sense taxes are pushing the inflation forward. In order to implement the expansion of employment without getting into an accelerating wage–price spiral, it is necessary to calibrate the taxation of labour incomes in order to increase the real wage level in line with the raise in the rate of employment. Since the income from labour is an essential part of the whole basis of public revenue, the risk of inflation sets certain limits to taxation.

The limits to taxation, in their turn, set bounds to public expenditure, not in order to "finance" them, but in order to bridle general economic activity at the desired level, without provoking an inflationary spiral. Here we can also find a criterion of what is meant by "too high" public expenditure. *If the economic activity has achieved the full employment level, and cannot be muffled with the help of taxes without provoking an inflationary spiral, then public expenses must be cut.*

The government demand of today is no doubt too low. The domestic activity volume must rise by more than a third, not counting the annual growth of the potential volume of employment of 2–3 percent, in order to reach full employment. In order to keep a moderate pace of wage increases, take-home real wages must also be raised by a third compared with today. The strategy of expansion must include a taxation program that meets these demands – if not, we are going to have problems with inflation.

To raise the real wages by one third implies *massive reductions* of the taxation of labour incomes. These reductions are far beyond what the most eager advocates of tax reduction are discussing. The complete abolition of the VAT, for example, would increase real wages by some 15 percent, which means scarcely half of the necessary increase. In order to manage the desired raise of real wages, VAT, specific taxes, income taxes and payroll taxes must be reduced *en masse*. These reductions should be carried out within a carefully planned program, step by step as the employment rate rises.

These extensive tax reductions will of course drain the public tax revenue. To some extent, but far from completely, this can be compensated for by higher taxation of other, "work-free" forms of income. But the main source of compensation is of course the *increased level of economic activity*.

According to calculations made by the OECD, the Swedish net of public revenue and expenses – the budget balance – increases spontaneously by 90 öre for each krona the domestic product expands. The increase in the domestic product that we are discussing is of the order of 400 billion kronor (in 1991 prices). A quick multiplication leads to an "improvement" of the public budget balance of 360 billion kronor – four times more than today's deficit. It must be kept in mind that this is just a very rough calculation. But according to this, we should be able to lower taxes by 250 billion kronor, and still have our public expenses fully financed by taxes – if only we had full employment.

An expansion will begin to nibble at this from two directions. To start with, this expansion is based on an increased government demand. If the estimations of the domestic multiplier effects, set out in the previous chapter, are fairly correct, it is implied that a permanent increase in the level of government demand of about 40–60 billion kronor will be needed. This means a moderate increase of about 10–15 percent compared with today's level. This level increase comes over and above the annual expansion of a couple of percentage units, which is needed to match the gradual growth in the potential employment. This level increase is not quite sufficient to restore full employment; there is some room left for the effects of the increase in exports, which is also needed.

An increase in government demand of the proposed size, will leave room for tax reductions (and improvements of the transfer system) of some 200 billion kronor, without

creating any permanent budget deficit. This room for tax reduction is enough to bring about the required increase in real wages. In other words, it is *fully possible* to balance the budget at the end of the expansion phase, without getting saddled with a severe inflation problem.

It is quite a different matter whether the budget *should* be balanced at all. An underbalanced budget leads to an increase in the government indebtedness. As is the case with the foreign debts, government debt does not have to be amortised. It is "rolled over", by the renewal of due loans. Just like the stock of foreign debt, the stock of government debt is uninteresting in itself, only the flow of *interest payment* should attract our interest. And the interest is of course only a minuscule fraction of the debt stock.

Government borrowing is no problem as long as the economy is in a phase of expansion. On the contrary, it is a good thing to stimulate activity and the national income by an increased budget deficit. But just as the case is with foreign loans, the reins must be tightened when the expansion reaches its final phase, *i.e.* when we approach full employment. Then the growth of the domestic product and employment volume must be reduced to a rate equal to the growth rate of the human capital. The rapid gains in domestic activity and national income of the expansion period are then followed by a much slower pace of development.

The development of interest charges on the government debt must not be allowed to get entirely out of step with the growth rate of the national income *in a economy of permanent full employment*. In an under-employed but expanding economy, an increase of debts is nothing to worry about, since the national income, and therefore the tax base, grows much faster than the costs of interest on the government debt.

Thus, the same rules of thumb are valid for the government debt, as for the foreign debt: In the expansion phase, borrowing can and should be carried out briskly, slowing down towards the end, when the employment rate is about to reach the desired standard. There is a strong element of an automatic function in both processes.

The daily fluctuation in the valuation of the Swedish kronor on the exchange market is more or less independent of the export and import flows, but in a longer perspective, the balance between exports and imports is of vital importance for the exchange rate. Here we can find a spontaneous form of adaptation, which secures a sufficient long-run rise in exports to converge towards imports.

The increase of government debt is also spontaneously restricted by the expansion of economic activity. The tax base grows along with the national income, and this causes public revenue to grow. Expenditure on unemployment benefits and social aid will fall for that same reason. When the expansion in public expenses is slowed down at the end of the expansion phase, the problem of "fiscal consolidation" will already be finished, as argued above. It is highly unlikely that severe political intervention, like tax increases or transfer reductions, will prove necessary at all.

The development of debt and interest payments that comes with an expansionary policy of full employment should not arouse any greater fears. Under all circumstances, the debt and interest development does not place any obstacles to carry through the expansion. This is the conclusive argument. This said, only one possible obstacle remains to an expansionary economic policy strategy to restore full employment, namely the risk of financial market turmoil.

*

Deregulation of the financial markets has a long history. Already in the beginning of the 1960's, the Riksbank gave the Swedish export corporations general permission to deal with the

currency flows emanating from foreign trade. The brilliant Swedish economist Sven Grassman showed as early as 1972 that deregulation had gone far enough for the currency reserve – the Riksbank's defence weapon against currency speculation – to be emptied in a fortnight if the traders should smell a rat.

The difference between the situation of 1972 and that of today, is that the fortnight has shrunk to a few days, or maybe even hours. This shrinkage depends on the explosive development of the turnover of international currency trade, a process that set off back in the 1960's and has accelerated enormously since, in particular after the breakdown of the international payment system (the Bretton Woods system) in 1971–1973. The rapid computerisation and the steadily improved telecommunications have constantly been fuelling this development.

The 1980's deregulations of the financial institutions' interest rate setting, and of the currency trade, were to a large extent mere confirmations of the *fait accompli* of market development. It is true that the deregulations were carried through with a unique degree of unskillfulness, and at the worst possible point in time. In that sense, the deregulations were almost catastrophic. But the criticism usually directed towards the deregulations amounts to that Sweden, by these measures, lost its economic policy autonomy. This criticism is not very realistic.

Sweden's possibilities to pursue an independent economic policy were not much affected by the deregulations. We have always been able to run an independent budget policy, and that state of affairs was not changed by the deregulations. The freedom of monetary policy action was highly restricted even before the deregulations, a fact not least demonstrated by the events leading up to the devaluation in 1981.

When the exchange rate is fixed, cross-border capital movements must be constantly warded off, in the first place by changes in the currency reserve, and in the second place by interest rate hikes. If the exchange rate is unrealistically high, it can well be impossible to put a stop to speculative currency outflows – a bitter pill swallowed in the autumn of 1992. Neither a 120 billion kronor worth fill-up of the currency reserve, nor an overnight loan rate of 500 percent would stop the rally against the krona.

The release of the krona to float in November 1992 changed the conditions of interest rate policy. The general school-book rule reads that a single country can *either* manage the short-term interest rates *or* the currency exchange rate, but not both at the same time. With a floating exchange rate, we have suddenly become spoilt by being able to manage the short-term interest rates, but in return for that, the exchange rate of the krona goes up and down like a seesaw. Despite the chagrin of a varying exchange rate, this regime is clearly preferable to the former, fixed exchange rate regime. The rapidity and force of the international speculative capital movements are simply too great for a fixed exchange rate to be practicable any longer.

A regular pattern during the period of flexible exchange rates is that downturns in the exchange rate are often associated with rising long-term interest rates. It should come as no surprise that the bond markets and the currency markets accompany one another in this fashion, since both effects originate from the same speculative capital flows. The global financial system is characterised by a lot of "nervous money" floating around, standing by to quickly enter into, and equally quickly pull out of, a position in some country which is suitable at the time.

As many countries, Sweden amongst them, has experienced, such speculative impulses can cause much disorder, in the form of bond market slides (raising long-term rates of interest), drying up of the currency reserve, panic-stricken short-rate hikes, and – if nothing helps – devaluation. The entire European exchange rate co-operation, the EMS, was speculated to pieces in the financial debacle of 1992–1993. After that collapse, a system of floating exchange rates was in fact introduced.

Under a floating exchange rate regime the short-term rate can be fixed at will on any desired level. Such a fixed interest rate policy was pursued – tacitly – by the Swedish Riksbank, commencing in 1993 and ending in August 1994. The weakness of that strategy is the mirror image of the Achilles' heel of the fixed exchange rate: In a fixed exchange rate regime, the control of the short-term rates of interest is disposed of. Thus, that rate may move up and down in sudden chops and changes. In a fixed short-term interest rate regime, the control over the exchange rate is parted with. Thus, the exchange rate goes on a roller-coaster ride, lead by the variations in the market demand for the currency.

As stated before, movements in the currency exchange rate are accompanied by movements in the valuations on the bond markets. This implies that the long-term rates also change with the waves of speculative sentiment on the markets. During the late winter of 1994 the long-term rates of interest started climbing from the relatively low level of 7 percent. During the spring and early summer the climbing accelerated, in parallel with the weakening of the krona. The five-year Treasury bond rate got way over 10 percent before the Riksbank got itself together and raised the governing repo short-term rate.

Obviously, the Riksbank has learned their lesson. Today, a considerably more flexible short-term rate policy is being pursued, with small and frequent changes of the repo rates. The late start of the rate hike suite during the autumn and winter of 1994 has been dearly-bought, though: the currency remained grossly undervalued when the international business cycle peaked, and then overvalued as the markets slackened. In other words, the impact of the international business cycle on the Swedish economy has been *amplified* rather than dampened by the tardiness and clumsiness of the Riksbank.

The actions of the Riksbank are of great importance to the stability of the interest rate and currency exchange rate developments. The recent refinement of the Riksbank's repo rate policy should give us good hope about a greater degree of financial stability in the coming years. This improvement is however not enough – we can and should accomplish much more in order to promote financial stability.

*

The experiences of the turmoil in 1994–1995 also gives us reasons to call in question the actions of the Treasury, or rather the *co-ordination* of the Riksbank and the Swedish National Debt Office (SNDO, the Swedish treasury).

In 1994, the State budget deficit was very large – a fact that hardly could have escaped anybody, considering the altogether alarmist media reporting of the matter. The deficit was, as usual, almost entirely financed by issuing Treasury Bills and Treasury Bonds, an activity run by the SNDO.

The problem during 1994 was not that the budget deficit was too large to be easily financed – budget deficits can always be financed, but not anyhow at any time, no matter how small. When the bond markets started falling (*i.e.* when the long-term interest rates started to rise), not only the Riksbank failed to act, but the SNDO also continued their shovelling out guilt-edged on the increasingly sluggish bond market.

The whole of the dreary spectacle of 1994 could most probably have been avoided, if the Riksbank and the SNDO had conferred to dampen the inflow of guilt-edged. Instead, State borrowing could have been, temporarily and partly, transferred to the Riksbank. By borrowing in the Riksbank, the particularly short-termed kind of credit, which is called *money*, is created. If the State increases its borrowing in the Riksbank, a smaller increase of the Riksbank's lending rate *might* be necessary, in order to countervail the impulses to expansion of the money stock.

Such a rate hike would endear, and thereby tend to diminish, the private banking system's borrowing from the Riksbank.

The situation in the spring of 1994 illuminates in a nutshell the problems caused by having two separate authorities, lacking adequate co-ordination, to handle the financing of the State budget deficit. The natural solution would be to co-ordinate the actions of these authorities, which may be done in several different ways. One way is to establish a common Financing Office, which will assume the responsibilities of both the Riksbank and the SNDO. Another way is to set up a common co-ordination and supervision group, but still let our age-old Riksbank and our fine SNDO keep their own sign over the entrance door.

A complete co-ordination of the Riksbank and the SNDO would open up for a far more sophisticated policy in order to stabilise the financial markets than has been practised so far. Such a policy would give full flexibility in the choice of maturity structure of the State borrowing, which in turn would considerably improve the possibilities to dampen the impact of speculative oscillations in market demand. The less it swings, the more the speculators are deprived of their livelihood and joy, to the benefit of all entrepreneurs.

An institutional co-ordination of the Riksbank and the SNDO will of course not *ensure* that the interest and exchange rate policy will be run the best way. But at least it prepares the ground for a good policy, and judging from the Riksbank's apprehension, one has some reason to hope that the policy will get tuned after a while. The trouble is that an expansionary policy for full employment is needed *acutely* – actually, it should have been started a long time ago. A good financing technique is necessary condition for the expansion to succeed, and the time to learn is unfortunately non-existent – it must be rightly done right from the start, at first trial.

From the financial point of view, the initiating phase of the expansion is the most important. There is an imminent risk that the mere announcement of the expansionary programme, or even serious preliminary discussions of it, will spark off speculative disruptions. If that happens, the Riksbank and the SNDO must set in forceful countermeasures, partly by re-biasing the maturity structure of the State borrowing (shorter instruments and a larger element of the "printing press"), partly by increasing the borrowing abroad in order to countervail the capital flows out of the country, but also, possibly, by a slight increase of the repo rate of interest.

The measures must be set in whole-heartedly, as if to show "how to wear the breaches". The measures should aim at stabilising the *bond markets*, rather than the currency exchange rate. All experience tells us that a damaged bond market is extremely hard to restore. This is different compared to a depreciation of the currency exchange rate which may easily recover. Moreover, the exchange rate of the krona is of secondary concern for the simple reason that we do not mind an increased exports, which also will contribute to an increased domestic activity and employment.

Storms do not last forever, that holds true on the financial markets as well. But where the tornado ravages much can be devastated – one must make sure that the roof does not blow off the house. In the lull between the storms, interest rates and currency exchange rates are chiefly determined by the performance of the real economy. Countries with persistently rapid growth and low inflation are rewarded by low rates of interest in relation to the exchange rate of the currency.

Take Japan, for example, who has such a solid reputation of high growth and low inflation that she has ended up getting problems with the over-valued yen. That problem would be easily solved by lowering rates of interest, but now the interest rates are already practically zero in Japan, so they can hardly be lowered any further!

Countries with stable growth and low inflation are usually spared the really severe speculative attacks that keep hitting the slow-growth and high-inflation countries time after time. After many years of an economic policy beneath contempt, Sweden has unfortunately joined the

easily assailed group, and thereby she has got stuck in a kind of economic policy Catch 22: In order to expand the economy, the financial markets must first be stabilised, and in order to stabilise the financial markets, economic activity must first pick up. We can only break free of this catch by stabilising the financial markets *first*, and in order to do so, a co-ordinated and powerful monetary policy is needed.

The Market, this hagridden ghost of the debate, is extraordinarily apt to "look ahead" – it always accepts the *fait accompli*, and it is less resentful than most of the political and social forces. The discord between the Riksbank and the SNDO prevailing in recent years, in conjunction with miscellaneous strategical mistakes in the uncoordinated policy of the two, has been shamelessly accommodating to the speculators of the financial markets. A compactly co-ordinated, resolute mode of action on behalf of the State financing authorities would bring this period of speculative ravage to an end.

The effects of seriously take on the speculation problem should be very favourable, not only from the real economy point of view, but also from a psychological and democratic perspective. Today, our responsible politicians seems almost paralysed before the power they *believe* lies hidden behind anonymous Reuter screens. To expose this optical illusion should perhaps restore the self- esteem of the politicians, a confidence needed but seemingly missing for the time being.

6. Some concluding reflections

Our odyssey through the economic aspects of the employment problem leaves many of the human and social angles untouched. Under-employment is not only an economic scourge, but primarily a human, social and democratic morass. In the economic debate of today, these things unfortunately not appear conjoined. It is as if one has forgotten the very point of economy – to mobilise the knowledge and talents of the people in order to bring about the highest possible well-being.

Good economy goes hand in hand with a more humane society, an increased sense of community and an improved democracy. It was Adam Smith who argued that the wealth of nations could never be increased at the expense of the wealth of the population – the two amount to the same thing. Neither the weal of high finance nor that of public finance should ever be allowed to rank before the weal of the people. Today it seems to be generally believed that heavy hands, "cold turkeys", and belt-tightening are the right cures in order to restore economic health.

The hostility towards consumption is widespread, and in later years cheered by various grades of environmental activists who are not capable of distinguishing between activities and odds and ends. The Unholy Alliance of austerity-quibbling economists, ignorant environment prophets, and miscellaneous mortification philosophers, has contributed to put a heavy lid on the well of all employment. The economic wisdom of reducing consumption can easily be assessed by the aid of the following quotations of four of the most prominent economist of all times:

*Consumption is the sole end and purpose of all production; and the interest of the producer ought to be attended to only so far as it may be necessary for promoting that of the consumer. The maxim is so perfectly self-evident that it would be absurd to even attempt to prove it. But in the mercantile system the interest of the consumer is almost constantly sacrificed to that of the producer; and it seems to consider production, and not consumption, as the ultimate end and object of all industry and commerce. (Adam Smith)*²⁹

*Consumption – to repeat the obvious – is the sole end and object of all economic activity. (John Maynard Keynes)*³⁰

*Consumption is the alpha and omega of economics. (Irving Fisher)*³¹

*But of all the indirect causes of production, the most powerful, beyond all question, is consumption. If man were not consume, how scanty, comparatively, would be the produce of the earth. Consumption, therefore, is the main fundamental cause of production. (Robert Malthus)*³²

In their ardour to establish "sound finances", some economist seem to have forgotten the core principle of the latest 200 years of economic theorising. Actually, things have gone so far that he who claims consumption to be the purpose and the prime mover of the economy, will be subjected to the embarrassed giggles of the students of the subject, as if it was some kind of absurd joke, and not a fundamental principle.

The belt has been tightened, time after time, for nearly twenty years by now. One "crisis package" after another has been administered, and every time the prospect of economic recovery has been held out. But the last twenty years of accelerating belt-tightening has not helped, but wrecked, the Swedish economy. Today, Sweden is probably the most severely under-employed of all OECD countries. Our domestic activity level and national income has plunged

²⁹ *The Wealth of Nations*, vol. II, p.155.

³⁰ *The General Theory of Employment, Interest and Money*, p.104.

³¹ "Income and Capital", reprinted in Parker and Harcourt (1969), *Readings in the Concept and Measurement of Income*, p.39. Note that quote is not authentic – Fisher uses the term "income" to denote "consumption", vide Erik Lindahl's essay "The Concept of Income", reproduced in that same volume, p.54.

³² *Definitions in Political Economy*, p.98.

dramatically in relation to the other industrialised countries. The Swede of today is a pauper of the industrialised world.

The austerity prophets have had two decades to prove that their policy helps. Following their advice, the politicians have strapped the belt tighter and tighter. Is that how things should be? Has not practice shown, with extraordinary clarity, that the "savings" policy is all going to pieces? Or should we run another heat or two? Five years? Ten years? How deep should the standard of living be allowed to sink, before the "fundamental" ideas are reconsidered? Is the level of Spain enough? Or do we need that of Turkey? Or Nigeria?

The cutback policy is on the wane. The Swedish economy has already been so terribly ruined that this simply *cannot* go on much longer. The ideas behind the "savings" are long since proved both erroneous and pernicious. It is now only a question of time before the responsible politicians come round and change their attitude. It can be done now, unleashing some justified rage over a great many lost pennies. But it might also be postponed until we have a social, economic and political collapse at hand, involving a lengthy and difficult period of rehabilitation for the nation.

The choice between immediate reconsideration and continued obstinacy lies with the present government. No earlier government has pursued the belt-tightening policies as stubbornly as the present one. The finance minister aims at, in his own wordage, make Sweden the "World Champion of budget consolidation". The cutbacks decided by parliament last year (with the kind support of the ex-communist "Left Party") are the largest that have been carried through by any industrialised country in our time.

The consequences of this extremely tough policy has already started to appear: The stagnation in output and employment is complete at present. Thus, under-employment is increasing as the human capital continually grows. On this background the government's promises to "halve the unemployment" until the year 2000, play way out of tune. The economic policy actually pursued reads that the government is trying, with all their force, to *increase* under-employment.

Considered soberly, it is not very probable that this government, which has put so much prestige into this impudent fiscal policy, will be capable to a volte-face. Still this is our only hope until the elections in 1998, and all we can do is to appeal to the government to be reasonable.

*

The work designing a detailed strategy for the restoration of full employment should be initiated right away. A suitable course of action would be to appoint a commission of economic experts (though not another group of austerity prophets this time) with explicit instructions to erect an *expansionary* economic policy strategy to restore full employment within, say, ten years. In the light of the commission's advice, the government should draw up a schedule for the implementation of the expansion. This scheme should be at the bottom of the government's declarations of intent and the economic policy bills during that ten-year period, and also (in relevant parts) direct the activities of the Riksbank and the SNDO.

The rate of employment was at 75 percent in 1993, with 1970 still as the base year. Due to the backlog in the production of statistics, we cannot as yet obtain the figures for 1994 and 1995. But a good guess is that the employment rate remained more or less unchanged during these two years, and that it started to decrease again in 1996. Today it is most probably at a level of 73–74 percent, with a corresponding rate of under-employment of 26–27 percent. Thus, the employment problem is slightly larger today than in 1993.

A ten-year programme in order to raise the rate of employment to 100 percent would therefore translate to an annual increase of a good 2.5 percentage points. Since the potential volume of employment keeps growing uninterruptedly, the actual volume of employment must expand faster than the human capital growth, and the difference in growth rates must be sufficient to raise the rate of employment by approximately 2.5 percentage points per year.

Let us assume that an expansion is started in 1998, and that the starting-point is a 27.5 percent rate of under-employment in 1997. With a rectilinear increase of the employment rate of 2.5 percentage units per year, the expansion phase should be finished by the year 2008, when a 100 percent employment rate is reached. The question is at what rate of growth the actual volume of employment must be, in order to reach the desired increase of the rate of employment?

The answer to the question depends on how rapidly the human capital grows during this period. As was asserted in chapter 3, the development of the employment potential is relatively simple to predict, provided that no major disaster occurs. Our productive knowledge and abilities tend to grow in a steady trot from year to year, and there are no reasons to presume otherwise for the future. Therefore we can safely extrapolate the historical development trend into the future, in the safe assurance of that the prognosis will not be wide of the mark, even if a well-designed full employment strategy probably in itself will stimulate the employment potential to grow somewhat faster than it would have done otherwise.

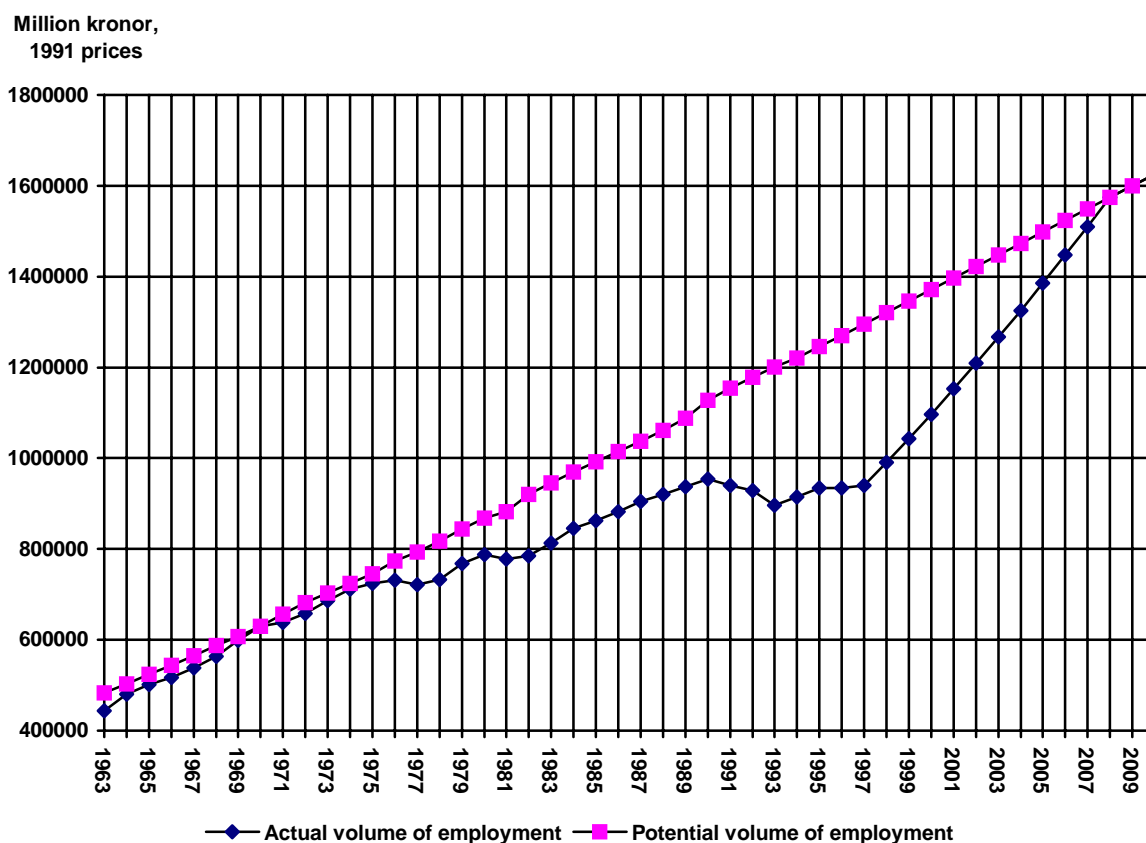


Diagram 6.1. The actual and potential volume of employment during 1963–1993, including prognoses for 1994–2010. Sources: Statistics Sweden, National Accounts, Survey of Living Conditions and own adaptations and calculations.

The predicted growth of the potential volume of employment during 1994–2010 is shown in diagram 6.1. According to the prognosis, the rate of growth becomes somewhat weakened over the years, from a rate of 2.1 percent in 1994 to 1.6 percent in 2010. This weakening trend is actually only a pure extrapolation of the observed weakening during 1963–1993. In the 1960's, the human capital grew by 3.5–4 percent a year, while the pace at the end of the 1980's was moderated to 2–2.5 percent. In so far as this weakening trend depends on the decrease in real wages during that period, it is likely that this prognosis underestimates the increase of the potential of employment in the future.

The consequence of such an underrating is that an *even larger* expansion of the actual volume of employment will be needed, in order to restore a 100 percent employment rate. Probably a somewhat more powerful (or lengthier) expansion will be needed in order to reach full employment.

In diagram 6.1, the actual volume of the employment is also shown, partly in the shape of a the historical development of 1963–1993, partly as an expansionary scenario reaching full employment in 2008. As can be seen, the curve is sloping steeply upwards during the expansion phase of 1998–2008. After that, it levels out, coinciding with the curve of the potential volume of employment, exactly as it should whenever full employment is prevailing.

For purely optical reasons, the slope appears steeper than it actually is (this is due to the vertical axis not originating in zero). Moreover, the growth path is practically rectilinear, implying that the percentage growth rate is higher at the beginning of the expansion phase than at the end: The rate of increase in 1998 is 5.3 percent, whereas in 2008 it is only 4.2 percent. Growth rates of this size are in no way unrealistic. We had them during the 1960's, for example. After 2008 the rate of growth with regard to the volume of employment is weakened, to 1.6 percent a year, which of course is the same rate as that of the potential volume of employment.

These estimated growth rates for the actual volume of employment should at all times serve as guidelines for economic policy. The yearly expansion of the government demand should be dosed to push the growth rate of the domestic volume of employment as close as possible to the warranted figure. It cannot be safely pre-asserted how large an expansion will be needed each year, since we do not know how the export volume (and some other variables, *e.g.* the price relations between exports, imports and domestic activity) will develop. If exports grow rapidly, the domestic government demand must be grown a little slower, and vice versa.

Computations of multipliers can of course be made for a host of different purposes. For example, we can calculate different scenarios for the public finances, in order to estimate the need for borrowing or increased taxation, or for the import development and the need to borrow abroad or to increase the exports. A thorough examination of all those aspects must fall outside the scope of this book, but it is certainly an important part of the work of a prospective expert commission.

*

The present employment situation in Sweden is the worst since the depression of the 1930's, if not even worse. That time we got off lightly. The chock drop in 1930–1931 was turned around to a recovery within a couple of years, and the 1930's as a whole did in fact display high growth rates in employment and production – despite the depression.

The depression of today is of a completely different character. The decline has taken place in several rounds, with intervening periods of a fairly stable rate of employment. Due to this pattern, the psychological shock effect which characterised 1930–1931 has not made its

appearance. Instead, we have got a tedious, almost permanent, atmosphere of crisis – zealously propagated by the press, radio and TV.

Apathy is probably more widespread today than in the 1930's. There are no larger, established organisations that channel the frustration created by the depression. The people do not engage in the solution of social problems like they did in the 1930's, but instead they shun political life. In the 1930's, the Social Democrats were leading both the intellectual and the practical policy struggle against unemployment. Today, a tired and listless Social Democratic party is administering the very same ideas that Wigforss and Erlander³³ fought.

Taken together, the socio-psychological, political and organisational prerequisites for breaking the depression are poor. Sweden has been transformed from a society of citizen activity, sprouting organisations, rational political debate, in short a flourishing democracy, to a rather depraved society, marked by apathy, greed, language of force and fatalism. This disorganisation, this cultural and moral crisis, is intimately connected to the economic decay.

In a monetary economy, most activities are conditioned by somebody paying for them, and this goes for the cultural activities as well. If the flow of payments is cut back, so is the flow of activity. Human creativity, our spontaneous urge to act, is largely paralysed by the policy of austerity.

The intellectual tools by which the suffocation is brought about, are to be found in the faulty economic theory that dominates Sweden today. This conventional wisdom does, to quote Keynes, "ramify, for those brought up as most of us have been, into every corner of our minds". By the mastering of the theoretical tools, by the moulding the economic usage, the ruling elite can hold the population cooped up in a lingual and mental cage. The Swede is not unreasonable – he bows to the inevitable. So, if the finance minister says "we must save" or that "there is no more money", then that's it, thinks he.

That is how the abominable analogy between the "strong-box of Mother Sweden" and the "wallet of Mr. Svensson" works. The money in the latter can certainly be used up, a fact to which Mr. Svensson has become more and more acquainted over the years.

The exertion of power is all about creating and using this kind of asymmetries. By making Mr. Svensson and all other well-meaning and responsible citizens believe that the government budget works like a private wallet, they can not only be lured to accept, but also to zealously assist, in the dismantling of the democracy and the return to a society with large differences in income and power.

The most decent of mid-Sweden Social Democratic mayors are currently demolishing the health care and education built up by the political struggle and hard work of generations. The most impeccable of MPs are blighting child allowances and pensions which Möller³⁴ and Erlander fought like bears to introduce and improve. And the *only* reason why these splendid people carry on this fearful demolition of our proud welfare state, is that they *believe* that the "strong-box is empty", or that "there is no more money", or that "we must save" – Lord, have mercy!

Our state and our municipalities are not governed by blockheads, nor by malevolent intriguers. But the allegations that there is money, that cutbacks are unnecessary, that consumption is the best of things, that it is indeed possible to "mortgage the stock", each provoke amused faces by nearly everyone of them. As the different arguments are woven together into a logical entirety, the amused faces turn bloodshot. Facing the question *why* one cannot "mortgage the stock", the rage and bewilderment is complete – as is the absence of replies.

³³ Ernst Wigforss, a well-known Social Democratic ideologist; finance minister in 1932–1949. Tage Erlander, leader of the Social Democratic Party and prime minister in 1946–1969.

³⁴ Gustav Möller, minister of social affairs 1924–26, 1932–1951.

This is how hard the causes of the Swedish depression are to understand. The notions of "budget consolidation", "saving", and the like, are not rationally founded. Nearly every local councillor, not to speak of the MPs, carry an Eleventh Commandment about – "Thou shalt not mortgage the stock". But none of them seems capable to explain *why* this cannot be done.

The fiscal prejudices were fought with some success during the first decades after World War Two, not least through the lessons learned by the horrors of nazism.

The German Chancellor during the late Weimar republic, Heinrich Brüning, was the most obsessed by fiscal orthodoxy of all statesmen at the time. His fear of budget deficits made him pursue a policy of merciless austerity, which forced the German unemployment rate up to 40 percent. The increasingly desperate population came to view Hitler as "unsere letzte Hoffnung" – our last hope. A racy detail in this historical misery, is the Keynes met Brüning in Berlin 1932. The Chancellor had to face harsh criticism, but Brüning boldly declared that it would be folly to give up "a hundred yards from the finishing post".³⁵ But Brüning never reached the finishing post. Instead, he unrolled the red carpet for Hitler.

After the War, there was a strong conviction throughout the Western World that a new, economic depression should be avoided at any price, not least in order to eliminate the risk of a new Hitler. The prejudices against budget deficits were pushed aside by the ideas of *functional finance*, sported by Abba Lerner, James Meade, Paul Samuelson, and the other leading "Keynesians". The government budget balance was no longer considered as an end in itself, but as a *means* to balance the real economy – to achieve full employment without inflation.

But the "Keynesian revolution" soon became bogged down. The ideas of a fiscal policy expansion were soon watered down, and were put to practice only in a few cases. The fiscal orthodoxy endured in all essentials, and beginning in the early the 1970's, it has gradually reconquered the bastions of fiscal policy.

The domains of the budget policy were limited to *stabilisation policy*, the difficult (not to say impossible) task to level out the business fluctuations. The original idea of raising the *level* of activity – the trend around which the business cycle swings – had already disappeared from the agenda by the beginning of the 1950's. The closer the concept of "Keynesianism" was associated with stabilisation policy, the more it fell into disrepute. This process of degradation was begun in earnest during the 1960's and reached its peak in the beginning of the 1980's. That this "Keynesianism" had very little to do with the ideas of Keynes was discovered as the *Collected Writings of Keynes* were published during the 1970's.

During the 1980's, a second Keynesian revolution has taken place in the international economic research. Every year, 50–100 volumes with the theories and works of Keynes are published throughout the world. The research carried out into Keynes is so intense that one could talk about an international "Keynes industry". The academic world in Sweden has not yet been influenced by it. It will be truly exciting to see how much longer the Thought Squad of the economics departments of the Swedish universities are able to debar this tide.

For the turn in the academic discussions is slowly but surely penetrating economic policy-making. The "neo-classical", "neo-liberal" or "monetarist" ideas are stone-dead. The Bank of England as well as the Federal Reserve take a soft and pragmatic stance these days. The Treasuries throughout the world are becoming more cautious with "budget consolidations" – the world record winner's stand is gathering dust awaiting the ascent of Erik Åsbrink.³⁶

The sobering up after a couple of decades of stagnation and rising unemployment is fully under way internationally. The Swedish politicians, who have been the most "responsibility-

³⁵ Story from Robert Skidelsky's biography *John Maynard Keynes. The Economist as Saviour*, Macmillan 1992, p.435.

³⁶ Swedish finance minister at present.

soaked” of all, obviously find the intellectual dry-up somewhat more difficult. It is nonetheless necessary.

Sweden can and should restore full employment. True, there are some caveats of financing technique which require a powerful action on behalf of the Riksbank and the National Debt Office. These obstacles are not insurmountable, but neither should they be underestimated. Otherwise, we are economically at liberty to spark off an expansion strategy.

The real obstacles to expansion are neither economic nor financial, but *political*. If the political desire to carry out an expansion is lacking, then surely nothing is going to happen.

I nourish but little hope that the present decision-makers will come to their senses. Today, they are marching like a lemming migration towards an economic, social and political precipice. The possession with savings and the obsession with austerity have turned into a national neurosis, based on the hallucinatory notion of the ”economically necessary”. The destructive forces are enormously strong. To stand up against the tide and appeal to common sense would most probably only lead to one being trampled down. The lemmings have made up their minds. They don’t know why, but they know where they are going. And they do what is necessary to get there.

Common sense will return in due time, even to the lemmings of convention. This moment is not far away. Even in 15 or 20 years we will most probably be surprised by the foolishness that marked this period, or – in the worse scenario – do everything possible in order not to repeat the disaster. Let us hope and do all we can to shorten the time until common sense returns. And let us remember these unnecessary decades.