

Labour markets and economic growth

Lessons from the UK

Patrick Minford

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Foreword

The reduction of unemployment is a major policy goal of the South African government. The problem is not unique to this country. In the European OECD countries by 1996 unemployment had risen to nearly 11 per cent and continues to rise. If the United Kingdom and Holland are removed the European average rises still higher, with the large economies of France, Italy and Germany having figures of 12-13 per cent of their working populations registered as unemployed. Worse, from the point of view of jobs, the employment-population ratio in Europe fell from 65 to 60 per cent from 1970 to 1996 while in the United States it rose from roughly the same level to nearly 75 per cent.

Why are the records of the USA, UK and Holland so different from the rest of OECD Europe? What reasons underlie their success not only in reducing unemployment but in creating jobs?

In the 1960s and 1970s equity considerations began to play a major role in the institutional framework surrounding European labour markets. Public insurance schemes, including pensions became ever more generous. Taxes became more onerous as these benefits had to be funded from labour productivity. Productivity in turn was affected by hours of work restrictions. Hiring and firing legislation became more restrictive, and the duration of unemployment benefits, their amount, and the ease with which they could be attained were all increased. Minimum, reservation wages rose.

The United States did not follow this pattern. Holland scaled back its welfare state in the middle 1980s while in the United Kingdom labour market institutions were overhauled between 1980 and 1990. Union powers were reduced, wage councils eliminated and employment protection legislation was weakened.

Professor Patrick Minford, author of this *Monograph*, was an influential adviser to the British government during this decade of supply side reforms. He shows how British labour productivity increased dramatically during the period of liberalisation (while German productivity fell as “welfarism” was introduced). He shows how the impact of a high reservation wage increases unemployment and – perhaps worse – traps people in unemployment and impairs the market clearing role of wages. The incentive to work for lower wages and the ability to hire the unemployed at lower wages are both reduced. Trade unions, and other already favoured “insiders” in the labour market may benefit but consumers, tax payers and the unemployed suffer. Not only is this detrimental to the interests of the less qualified who are priced out of the market, but it is especially harmful in a country like South Africa where such low productivity workers are fast emigrating to urban areas tempted by the (protected) high levels of wages enjoyed by the privileged. This is particularly galling if as Minford suggests, labour demand internationally is shifting against such potential workers.

Minford concludes by asking how the experiences of the UK and US can be transferred to South Africa? He laments the fact that British colonial administrators on-site and the politicians who succeeded them in post-independence Africa and India tended to be “Oxbridge” educated socialists (of whatever nominal political persuasion). He applauds the fact that the Hong Kong colony avoided this tradition. On South Africa, with its record of close on a century of independence Minford’s diagnosis is ambivalent. He believes it to fall somewhere between these two poles. As such, recent South African legislation for labour markets raising still further the level of inflexibility is to be expected but deplored. Conversely, opposing this trend may not be that difficult. South Africans have a long tradition of belief in the attractiveness of freedom. They have a long tradition of concern for their families, and so for the future. Harnessing these two forces to reverse current trends, to liberalise labour markets in order to improve everyone’s job prospects and future quality of life need not be impossible.

Professor Minford argues that specialist social scientists may be required to advise on how this can be implemented. As an economist he merely explains why it must be done if government goals of significant increases in employment, productivity and growth are to be attained.

The views expressed in this *Monograph* are those of the author and are not necessarily shared by the members or staff of the Foundation.

However, the FMF offers the *Monograph* as a contribution to the current debate. Few controversies are more important for the future of South Africa, and Professor Minford's input to the debate at an international level should not be ignored.

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Reference

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Note

Professor Minford's *Monograph* was delivered originally, in abbreviated form, at the South African Economic Society's Biennial Conference held at Potchefstroom in 1997.

The author

Patrick Minford has been Professor of Economics, Cardiff Business School, University of Wales at Cardiff since October 1997. Between 1967 and 1976 he held economic positions in the Ministry of Finance, Malawi; the Directors' staff, Courtaulds Limited; HM Treasury; HM Treasury's Delegation to Washington, DC; Manchester University; and The National Institute for Economic and Social Research. From 1976-97, he was Edward Gonner professor of economics at Liverpool University.

A member of the Monopolies and Mergers Commission 1990-96, he was one of HM Treasury's Panel of Forecasters ("The 6 Wise Men") January 1993 - December 1996. He was awarded the CBE for services to economics, 1996.

He is the author of several books and numerous articles on exchange rates, unemployment, housing and macroeconomics and writes a regular City column in *The Daily Telegraph*. He is the Director of the Liverpool Research Group in Macroeconomics, which publishes forecasts of all major economies monthly, together with policy and investment advice.

1

Introduction

For all that once, many years ago, I worked in Central Africa (Malawi, as it had just become) for two and a half years and have occasionally visited South Africa, I come before you as one quite ignorant of modern African affairs, not least South African; and I am naturally suspicious of anyone who does not know much about a country laying down the law about what it should do. Yet, nonetheless, I hope that I can draw some tentative conclusions from the work I have chosen to write about that are relevant to South Africa.

Let me start with a rough and quite general description of the South African economy – and without implicating them thank various authors for their insights (the 1988 book by the late Ronnie Bethlehem, so tragically murdered; Caldwell, 1989; Louw and Kendall, 1986; and Kendall and Louw, 1989). It is a country that one would naturally think of as potentially ‘emerging’, like a Korea or Brazil or India. The first two are clearly already emerging; the last is in the first stages of doing so. It is poor (a *per capita* income comparable to Brazil’s) and has a highly unequal income distribution, reflecting the presence of highly skilled workers (many of them of western origin) and of quite unskilled agricultural-subsistence workers. It has a large, capital-intensive, primary sector besides subsistence agriculture. It has good infrastructure. It has low wage costs, by western standards – of the same order as the most recently emerging east Asian countries. It has stable democratic institutions, including a strong bureaucracy and independent legal system. Every aspect of the economy, and particularly the labour market, is highly regulated (though attempts are being made to liberalise); as part of that structure there are strong unions with entrenched bargaining and strike rights. And it has very high urban unemployment; which I assume to represent large scale immigration from low-productivity (low living standard) subsistence farming areas to urban areas with relatively high welfare provision and wages.

This account reminds me intensely of India, another child of the British Empire – though with a quite different route out of it, South Africa being a product not so much of British as of Dutch culture. Though it is widely reviled by the Left, the curious thing is that the British Empire bequeathed besides infrastructure and democracy an essentially socialist heritage of ideas; a belief in regulation, decent universal welfare provision, and workers’ rights. Because of this essential socialism – bred by those post-war UK politicians who disposed of Empire – it was an easy touch for the many left-wing movements that destabilised imperial rule in Africa. This struck me forcibly recently when reading the careful account of the 1959 Nyasaland emergency by Colin Baker (1997); Macleod, a ‘one-nation’ conservative in the old Tory Left tradition, was eager to transfer power to Africa’s native politicians of the left, away from the crusty administrators of the colonial office who had what we might call the Hong Kong philosophy. In that he was at one with Harold Macmillan, as well of course as with the Labour opposition.

This imperial legacy then which South Africa partially shares with India has its good and its bad points, as I propose to argue below. I mentioned Hong Kong just now, as an example of the Colonial Office philosophy; Hong Kong was the colony that got away from the post-war independence movements and thereby developed along the state-minimalism lines in which the Colonial Office believed. It makes an interesting contrast with the results of the choices made by so many African countries, as by India under the Oxbridge-educated Ghandi family.

I offer these parallels and observations in the full knowledge that South Africa’s history is unique; it ceased in any real sense to be part of the British Empire after the Boer War and its black independence movement was led by a leader, Nelson Mandela, who certainly became appreciative of free market ideas. Nevertheless the ideas within which its modern structure was created have much in common with those that forged these other countries. The parallels bear eloquent witness to that.

In the rest of this paper I want to reflect on the experience of a mother country (the UK) in reforming essentially this sort of structure. It is well-known that the British economy was a basket case by the late 1970s and in the view of despairing top civil servants had even become ungovernable. Sensing that everything had been tried within the philosophies of that time, the British people were ready to try a different course. To their surprise and relief, it appears to have worked out, whence the recent election of an alternative government after 18 years that is committed to maintaining these reforms.

I then want to talk about how emerging market countries achieve their results within the world economy. Until the dramatic evidence from East Asia, the prevailing wisdom in development circles was that aid, not trade, was the route to growth. The last two decades have stood this wisdom on its head.

Finally, I want to say a few words about political feasibility and the general welfare. It is sometimes argued that egalitarianism is both desirable for moral reasons and necessary for practical reasons (to avoid riots and other instability); free market policies would on this view be impossible. I shall argue that people are ready to accept policies that produce substantial inequality in the short run, provided they are convinced of the long term benefits, if not to themselves, then to their descendants. People want to be part of a vibrant economy and are willing to make some sacrifices in the short run to that end.

2

Evaluating the supply-side programme

At least half the story of economic reform is that of regaining control of inflation. This implied restoring responsible monetary and fiscal policy; and abolishing incomes policy, which, besides being useless as a tool of inflation control, seriously distorted market forces. I shall pass over this macro part however because my focus here is on the supply side, growth and employment; good macro policy is an essential background to that but it is not enough. My other reason for not focusing on it is that there is widespread agreement today about the nature of good macro policy; disagreements in this area are largely technical, about exactly what to target and how. So let us turn to the supply side.

Microeconomic policy covered a broad spectrum of measures designed to increase the efficiency of the UK economy. They included (full accounts can be found in Lawson, 1991, and Thatcher, 1993) not only the well-known moves of privatisation and associated deregulation – the withdrawal of government from controlling market outcomes as opposed to setting the framework within which free markets could operate; but also the programme to bring down marginal tax rates by reducing government expenditure and by reforming the tax structure towards greater neutrality, that is where marginal tax rates on different people and activities should be made as equal as possible. Within the two programmes the tax and benefit disincentives and the state intervention (in support of union power and a miscellany of worker rights, such as minimum wages for some groups and controls on firing) in the labour market were of great importance. The labour market is the engine room of the economy; labour is the principal resource located in an economy with no real chance to move away (land is another, but far less important for the modern economy). It limits the economy's potential both in quantity and quality. Other inputs such as capital and raw materials can be hired in to fit with what labour can profitably produce. The UK economy had performed badly in terms of productivity growth and was beginning to perform badly also in terms of unemployment by 1979. This was connected with the stranglehold on industry of many competing unions whose demands were buttressed by rising benefits for those out of work and rising tax rates for those in work. The rest of the Thatcher microeconomic reforms produced undoubted gains but it was the breaking-up of this labour market stranglehold that was the key to its success. Without it the rest would have been of little value as the gains would have been appropriated by unions for their members; and unemployment would have soared as those laid off from greater efficiency had no prospect of finding fresh employment due to union and other regulatory barriers.

The supply-side programme had as its main objective the raising of the economy's potential growth rate per head, and as a further objective the increase of consumer sovereignty and related improvement in the use of the economy's output. If the national statistics of the quality of output are to be believed, then the value of output at constant prices should reflect improvements in the use of output, ie in the benefits each unit of output provides. The only omission would be any gains in consumer surplus due to the reduction in distortions such as taxes; unfortunately we have no general direct measures of this and so will have to ignore it here in favour of straight output measures.

Arithmetically we can split potential growth per head gains into gains in:

output per worker (productivity)

times

working age population as a share of total population (demographic and retirement trends)

times

worker supply as a share of the working age population (work participation)

times

employment as a share of worker supply (one minus the unemployment rate).

Government policy has effects on all of these; and the Thatcher programme was intended to raise each measure. I shall concentrate here on the first and last, productivity and unemployment, where the changes have been most dramatic.

Productivity

If we begin with productivity, we can see a considerable effect in behaviour post-1979 on a wide variety of measures bench-marked against major competitor countries. This benchmarking is necessary because it allows for the opportunities available to all countries from the general environment of technology change.

We can see a clear improvement for manufacturing productivity in the comparison with Germany (Figure 1). Here the immediate post-war period contrasts a free market Germany with a socialist Britain. Subsequent to 1979 Britain was reforming but Germany, to the contrary, had since the 1970s become steadily more interventionist. Table 1, taken from Crafts (1997), shows improvement compared with a wide group of OECD countries across both manufacturing (Table 1a, output per man) and for the non-government (business) sector (Table 1b, total factor productivity).

TABLE 1: Labour Productivity in Manufacturing

TABLE 1A: Growth of output per hour worked (% per annum)

	1960-73	1973-79	1979-89	1989-94
UK	4.14	1.01	4.13	3.95
USA	3.28	1.41	2.34	2.47
Japan	9.59	5.15	4.58	4.18
France	6.55	4.39	3.28	3.04
Italy	6.14	5.60	3.86	3.91
Germany	5.71	4.21	1.83	2.22

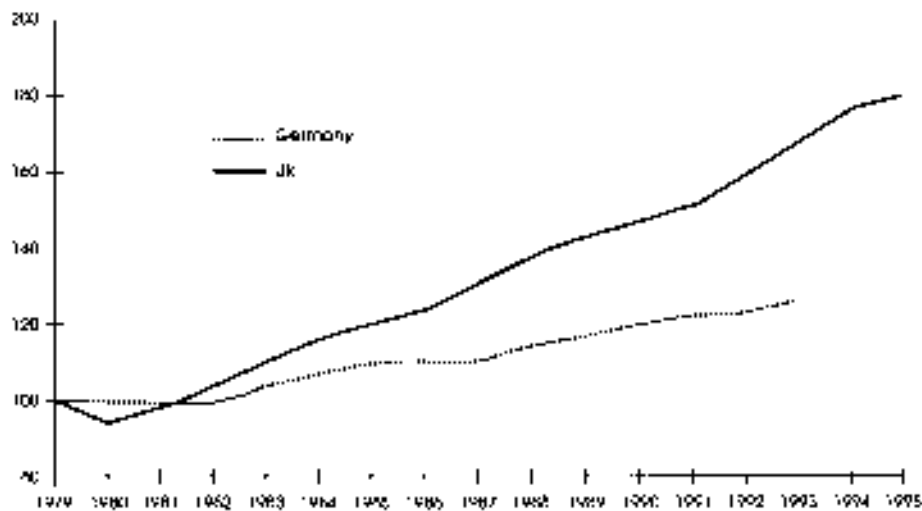
Sources: Broadberry(1996) and Oulton (1995) cited in Crafts 1997.

TABLE 1B: Total Factor Productivity Growth in the Business Sector (% per annum)

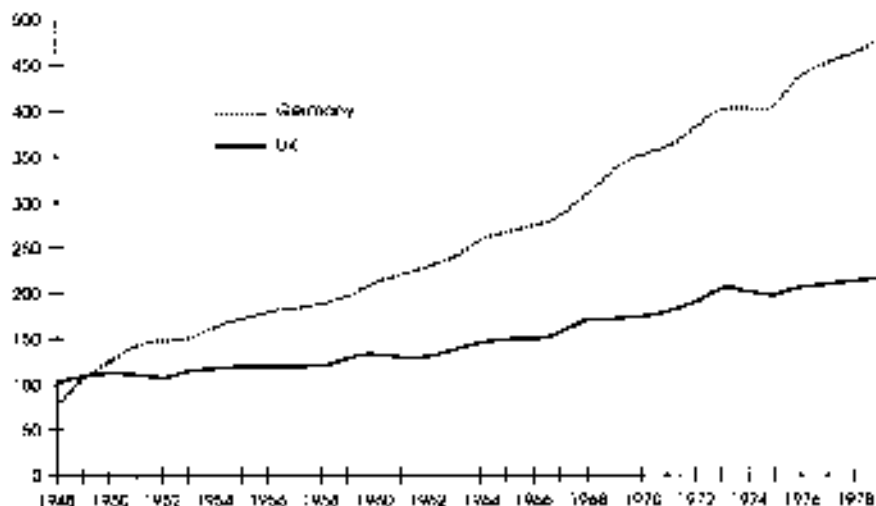
1960-73			1979-94		
1.	Japan	5.5	1.	Ireland	2.6
2.	Portugal	5.4	2.	Finland	2.5
3.	Ireland	4.6	3.	Spain	1.7
4.	Italy	4.4	4.	Portugal	1.6
5.	Finland	4.0	5.	UK	1.5
6.	Belgium	3.8	6.	Denmark	1.3
7.	France	3.7	7.	France	1.3
8.	Netherlands	3.4	8.	Belgium	1.2
9.	Spain	3.2	9.	Japan	1.1
10.	Austria	3.1	10.	Netherlands	1.1
11.	Germany	2.6	11.	Sweden	1.0
12.	UK	2.6	12.	Austria	0.9
13.	Greece	2.5	13.	Italy	0.9
14.	USA	2.5	14.	Australia	0.8
15.	Denmark	2.3	15.	USA	0.5
16.	Australia	2.2	16.	Germany	0.4
17.	Switzerland	2.1	17.	Canada	-0.1
18.	Norway	2.0	18.	Norway	-0.1
19.	Sweden	2.0	19.	Switzerland	-0.2
20.	Canada	1.9	20.	Greece	-0.3

Source: OECD (1996), cited in Crafts (1997).

FIGURE 1
Manufacturing Productivity in UK and Germany
1979 = 100



1938 = 100



Attributing this improvement to the changes in the environment is not easy. An attempt has been made by Bean and Crafts (1996) in a statistical analysis of 137 industries' behaviour from 1954 to 1986. Their regression is shown in Table 2. They find that the power of multiple unions is the major factor responsible for poor productivity; and that the Thatcher union laws and related developments reduced this power virtually to zero. Furthermore this reduction seems to increase the growth rate of productivity, not just its level. Hence we should expect to see this higher growth maintained.

Another element they identify is the shock effect of the 1980-81 recession and the accompanying shift of government and company attitudes towards cushioning labour redundancies. Whereas previously the government had often become involved in efforts to contain redundancies (one clear example being the intervention in British Steel during the late 1970s), the new

government refused any involvement, preferring to give help instead for relocation and retraining in particularly badly-hit regions such as South Wales and towns such as Corby. This signalled clearly that efficiency rather than job-preservation would guide employment behaviour; unions accordingly lost influence and power to hold up changing working practices.

TABLE 2: Panel regression of total factor productivity growth in British industry
(dependent variable total factor productivity growth)

	With Order dummies	No Order dummies
Capital growth	0.153 (1.49)	0.141 (2.11)
Union recognition	-0.086 (0.25)	0.055 (0.17)
Multiple unions	-0.754 (2.06)	-1.112 (3.38)
Multiple union dummy	0.689 (1.33)	0.668 (1.28)
Employment shock	-0.130 (3.36)	-0.134 (3.62)
Concentration ratio	0.703 (1.22)	0.388 (0.96)
Import share	-0.301 (0.47)	0.561 (1.07)
Standard error	2.391	2.689
R ²	0.210	0.196
Durbin-Watson	2.042	1.959
No. of observations	794	794

Notes: t-statistics in parentheses; coefficients on time and Order dummies omitted for brevity.

Source: Bean and Crafts (1996).

Unemployment

In early 1993 UK unemployment again all but reached the notorious 3 million mark – 10.6%. A number of economists suggested at the time that it would not fall much below that rate in the foreseeable future. The implication of such a view was that the UK ‘equilibrium’ or ‘natural’ rate was of this order. Even in May 1994, when unemployment had fallen to 9.4% a number of economists (for example, Metcalf, 1994, and Barrell *et al.*, 1994) continued to take a pessimistic view of the natural rate. By now (mid-1997) unemployment has fallen to 5.5% (just over 1.5 million) and the sceptical economists of that time have had to abandon such views. Nevertheless few believe unemployment can fall much further without triggering higher inflation. However the evidence suggests strongly that not only have reform policies been responsible for the fall so far but also this fall has substantially further to go.

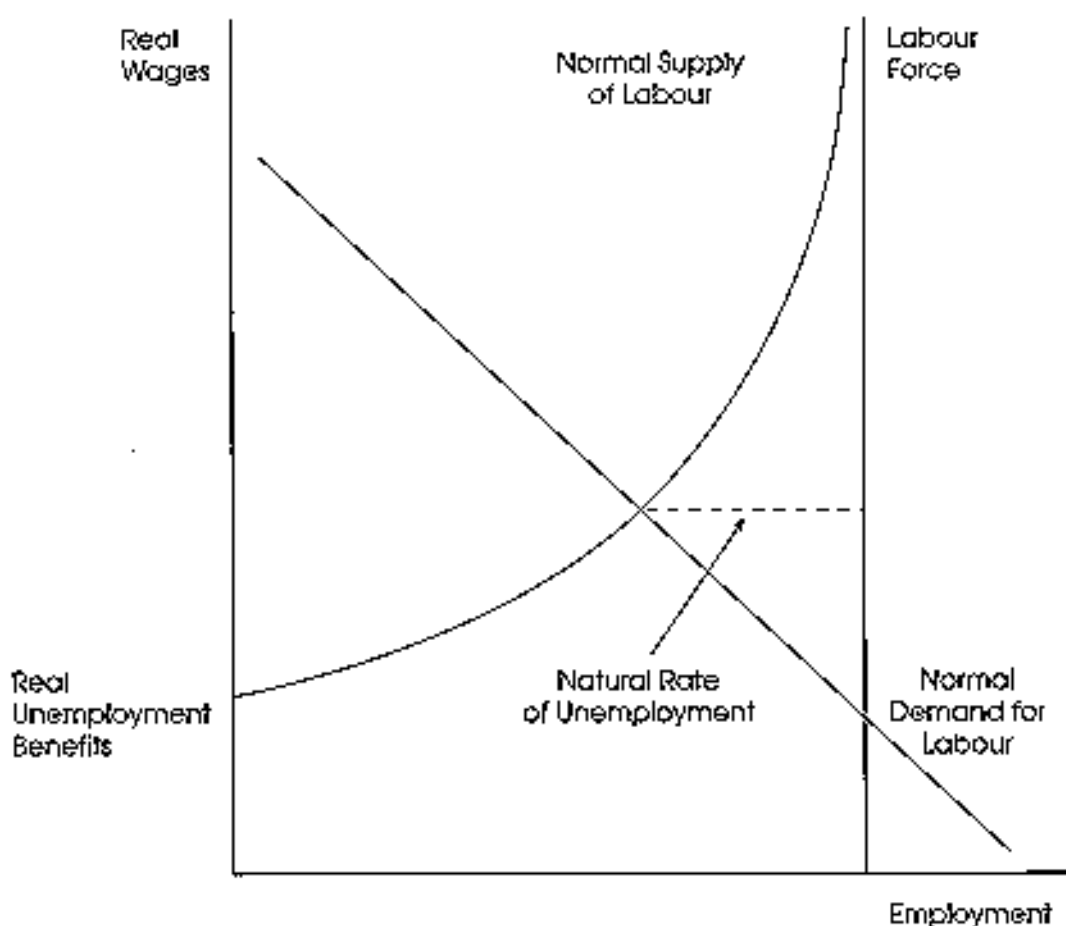
This alternative view (set out in full in Minford, 1994) is based on the work of my research group in Cardiff and Liverpool, which is embodied in the Liverpool model of the UK. We have used this model for regular forecasts, policy analysis and other exercises since 1980: a full account of it in its early annual form is Minford *et al.* (1984), and in its latest quarterly version in Minford *et al.* (1990).

In brief we would argue that the economic reforms of the 1980s created a new flexibility in the labour market which has pushed the natural rate down sharply from the peak of nearly 12% it reached early in that decade.

The natural rate

The natural rate of unemployment is calculated in the Liverpool model as the interaction between pressures driving up wage demands and the wages that employers can offer while still remaining profitable: both wage amounts are defined in terms of purchasing power (i.e. adjusted for inflation) since that is what matters to both parties. At the point where these two forces equate (supply = demand) we obtain an 'equilibrium' inflation-adjusted (or 'real') wage and employment (also unemployment) rate. This can therefore be thought of as the situation in which employment is (just) profitable for firms and wages are (just) worthwhile for workers. The idea can be illustrated in a simple supply and demand diagram as in Figure 2. In this diagram demand corresponds to what firms would want when the economy is in its normal state (that is in practice where the balance of payments on current account is not in deficit and where inflation is not unexpectedly high or low). The factors involved are familiar: productivity, taxes on employers including National Insurance contributions, indirect taxes, and the level of world trade (which means more can be sold abroad profitably).

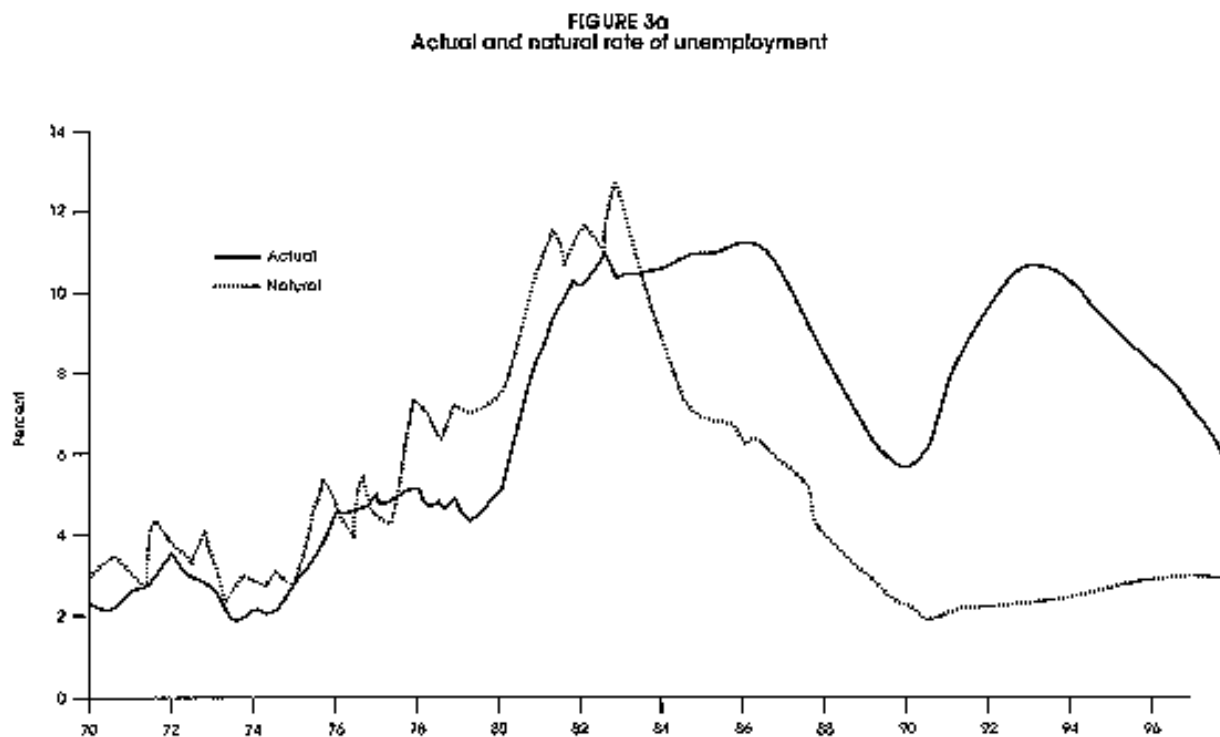
FIGURE 2
The labour market in an open economy under imperfect competition in the long run



The other curve in the diagram is labour supply, where the factors are less obvious. Unemployment benefits in particular have a direct effect in raising demands in so far as they compete with wages of low-paid workers (why work if wages do not pay at least as much as benefits and no doubt more ?) But there is a further subtle effect: they act as a floor on wage demands, creating a rigidity downwards in wages. This prevents adjustments (or 'flexibility') of wages in response to new shocks requiring wage falls – instead of wages falling, employment falls

and unemployment rises. Other factors on the labour supply side include the effect of union power in raising wage demands and taxes on workers (which mean that more has to be earned to compete with benefits).

Figure 3a shows the overall natural rate of unemployment we obtain over the last two decades from the model from the interaction of all these factors. It rose to a peak of 11% in 1981-3 and since then has fallen to around 2% today.



What were the constituent contributions from the factors we have enumerated to this natural rate estimate? Figure 3b shows the effects variable by variable. Interestingly the flat profile of benefits during the 1970s rules them out as having contributed to changes of the natural rate in that decade. However, in the 1980s the sharp rises in council house rents, fully compensated in unemployment benefits, but only partially in in-work benefits, substantially raised the benefit package. Besides this contributory role, the key role of benefits is in giving wage demands (along the supply curve of labour) their relative rigidity, arising, as discussed above, from benefits creating a ‘benefit floor’ for low-wage workers. The main elements producing change are unionisation, followed by taxes of various sorts. The former rises steadily to 1980 before steadily falling back. The tax rates move in largely offsetting ways until 1983 when their net effect is to lower unemployment, led by falling employer taxes on labour. Besides these we can see that the trend elements (productivity and world trade trends) produce a tendency to improvement which is reversed by the serious world recession of the early 1980s. Thereafter the ground is gradually recaptured over the 1980s.

One way to summarise this story is to say that trends in productivity and world markets managed after the world recession of 1982 to dominate (just) the effect of rising benefits, while 1980s supply-side influences reducing union power and lowering taxes had further reduced equilibrium unemployment by 1991 to below the level of 1970, restoring it (at around 2%) well towards the natural rate of the 1950s (put by the annual model at about 1%).

FIGURE 3b
Decomposition of the natural rate
Effect on log natural rate by variable,
as compared with 1970 Q1



Ultimately a low natural rate of unemployment depends on policies that permit wages to find a level equal to productivity especially at the bottom of the pay scale where benefits and ideas of social justice put an artificial floor below them. These policies are politically hard to implement in any country with a tradition of Christian and Social Democracy, let alone of socialism or communism; in the United States with its tradition of decentralised liberalism there has never, except during the Great Depression, been much pressure to pursue such policies. One might add that the 'productivity' just referred to could be interpreted in trade-theoretic terms as the 'equalised wage for equivalent labour' of the Heckscher-Ohlin-Samuelson (HOS) model, which we will proceed to make use of shortly. As we will argue, the downward pressure of low wage costs in

‘emerging markets’ across the world makes the policy dilemma of European governments the more acute; that is true even for a potentially emerging market economy like South Africa, since for its traded industries to compete internationally its wage costs must reflect these pressures. Yet if social and union intervention puts a floor below wages, the result will be unemployment. In effect the traded sector will contract (or fail to expand) until the marginal industry can pay these wages. Meanwhile, because these wages are well above rural living standards, they attract immigration from rural areas; these immigrants will in effect search for long periods, putting up with unemployment’s hardships, for the chance of such good jobs. But the strength of regulation and union intervention prevent wages falling to reflect this excess supply.

The irony for a country like South Africa is that the global opportunities from free market policies are virtually limitless. By allowing wage costs to fall, the traded industries would expand to create jobs in huge numbers while the attraction of excess urban immigration would fall. Unemployment would drop back to normally acceptable rates. We see this from the success over several decades (whatever their current financial problems) of emerging market economies like Korea, Singapore and China.

In the next section I expand on the question of just what these international processes (‘globalisation’ so-called) have been in the past two decades and how they can be explained in terms of trade and development theory (for a full account, see Minford *et al*, 1997).

3

The facts of the last two decades

I begin by describing the main trends of the past two decades that require explanation; and then describe the way they can be accommodated within a traditional HOS model¹ of the world economy. In particular I consider how far the process of ‘emergence’ among developing countries and technological bias against unskilled workers in developed countries may have contributed to these trends. In Table 3, left-hand column, are shown the key facts of 1970 - 90 for North and South, expressed as average change p.a. over the period. The North is the OECD. The South is all developing countries, that is non-OECD countries except the former Soviet bloc. While some of these are now plainly emerging, their history within the free world is too recent and their data too patchy to include. Many of these facts are usefully reviewed in Gundlach and Nunnenkamp (1994) and Nunnenkamp et al (1994) whose view of the processes involved also broadly coincides with ours here.

TABLE 3: Actual Data, 1970-90, and Simulated Shock Effects

Change p.a.	Actual	Simulations							
1970-1990		1	2	3	4	5	6	7	8
<u>North</u>									
<i>Unskilled / Skilled:</i>									
Wages	-0.9	-0.75	-1.08	+0.25	+1.84	+0.61	+0.03	+0.28	-0.355
Employment	-4.2	-0.48	-0.66	-0.34	-2.89	-0.43	+0.02	+0.15	+0.019
<i>Shares of GDP:</i>									
Manufacturing	-0.22	-1	+0.3	-0.09	-0.45	+2.19	-0.01	-0.16	-0.049
Services	+0.195	+0.1	-0.2	0	+0.47	+1.07	-0.05	-0.48	+0.12
Primary	-0.075	+0.92	-0.07	+0.08	-0.07	-3.27	+0.06	+0.63	-0.048
Non-Traded	+0.1	-0.02	-0.03	+0.01	+0.05	0	0	+0.01	-0.012
<i>Unemployment:</i>									
Unskilled	+0.4	+0.1	+0.12	+0.47	-0.18	-0.13	0	-0.02	-0.314
Total	+0.2	-0.02	-0.05	+0.38	+0.1	-0.02	0	+0.03	-0.285
<i>Living Standard</i>	+2.2	+0.25	+0.29	-0.32	+0.14	+0.31	0	0	+0.786
<u>South</u>									
<i>Unskilled/Skilled:</i>									
Wages	+2.3	+0.76	-1.07	+0.26	+1.83	+0.5	+0.03	-1.04	-0.096
Employment	+1.3	+0.47	-0.11	+0.03	+0.18	-0.08	+0.12	-0.08	-0.004
<i>Shares of GDP:</i>									
Manufacturing	+0.1	+1.31	-0.48	+0.16	+0.66	-2.44	-0.11	+0.18	-0.058
Services	+0.14	+0.05	+0.36	-0.06	-0.69	-1.63	0	+0.69	+0.046
Primary	-0.55	-1.23	+0.07	-0.09	+0.13	+4.37	-0.21	-0.86	+0.002
Non-Traded	+0.36	-0.13	+0.05	-0.01	-0.1	-0.3	+0.32	-0.01	+0.01
<i>Living Standard</i>	+1.1	+0.32	-0.01	0	+0.02	+0.12	+0.12	+0.01	-0.008
<u>World</u>									
<i>Relative Prices:</i>									
Manufacturing									
/ Services	-0.8	-0.27	-0.39	+0.09	+0.67	+0.06	+0.01	+0.11	-0.042
Primary / Services	-0.3	-0.16	-0.3	+0.06	+0.54	-0.35	-0.01	+0.1	-0.032
<i>North Trade Balances / GDP:</i>									
Manufacturing	-0.025	-0.93	+0.32	-0.11	-0.43	+1.93	-0.01	-0.12	+0.047

Services	+0.005	-0.01	-0.26	+0.04	+0.5	+1.31	-0.05	-0.51	-0.018
Primary	+0.02	+0.94	-0.06	+0.07	-0.07	-3.23	+0.06	+0.63	-0.02

Simulations:

1. Simulated effect of 0.5% p.a. rise in Southern manufacturing productivity
2. Simulated effect of 1% p.a. fall in Northern unskilled share across all sectors
3. Simulated effect of 1% p.a. rise in Northern unemployment benefit rate
4. Simulated effect of 1% p.a. fall in Northern unskilled labour supply due to rise in higher education
5. Simulated effect of 0.5% p.a. rise in Southern primary productivity
6. Simulated effect of 0.5% p.a. rise in Southern non-traded productivity
7. Simulated effect of 0.5% p.a. rise in Southern services productivity
8. Simulated effect of 0.5% p.a. rise in Northern general productivity (distributed 0.5% manufacturing, 0.28% primary, 0.625% services, 0.395% non-traded)

* All changes are expressed as % p.a. (average, 1970-90, except shares of GDP and Northern trade balances/GDP (% of GDP change p.a.) and unemployment (% of relevant labour force change p.a.)

In the North there has been ‘deindustrialisation’: the share of basic (non-complex) manufacturing in GDP has fallen. In the South there has been industrialisation mainly at the expense of agriculture. Notice too how sharply non-traded production has expanded there; also the large shift to traded services (which we define to include complex, i.e. skill-intensive manufacturing).

In the North wages of the skilled have risen virtually across the board. We define ‘skilled’ here as those with ‘high’ education (preliminary university education or equivalent). This seems appropriate in view of the emphasis, in modern technology, on knowledge-based, rather than craft-based, skill. ‘Unskilled’ then becomes the rest of the labour force. Our data comes from Nickell and Bell, 1995, and Nickell, 1995, gathered by them from other OECD economists.

In the South unskilled real wages appear to have risen both relative to skilled and in absolute terms. However, we have no data on skilled wages as such; we have had to infer skilled wages from per capita GDP, assuming this grows at the same rate as average real wages. Unskilled wages we have identified with general manufacturing wages. Our ratio of skilled to unskilled wages is consequently of doubtful accuracy.

Employment of unskilled workers has fallen everywhere in the North relatively to skilled. Skilled employment averaged about 14% of the total in the North as a whole at the start of the period but had risen to around 30% by the end.

In the South if we treat manufacturing employment as a proxy for unskilled, we find that it has risen both relatively to total employment and in absolute terms. As with wages however we have no data on skilled employment directly and have inferred it from total employment. Again our ratio of skilled to unskilled employment is of doubtful accuracy.

Per capita GDP growth in the North has been roughly double that in the South, a well-known fact.

Unemployment rates among the least skilled have risen everywhere in the North. Absolute rates of unemployment are in the low or high teens across the OECD virtually without exception. Unemployment rates among skilled workers, again as measured by upper-secondary education or above, have risen too, so that overall unemployment rates have risen too.

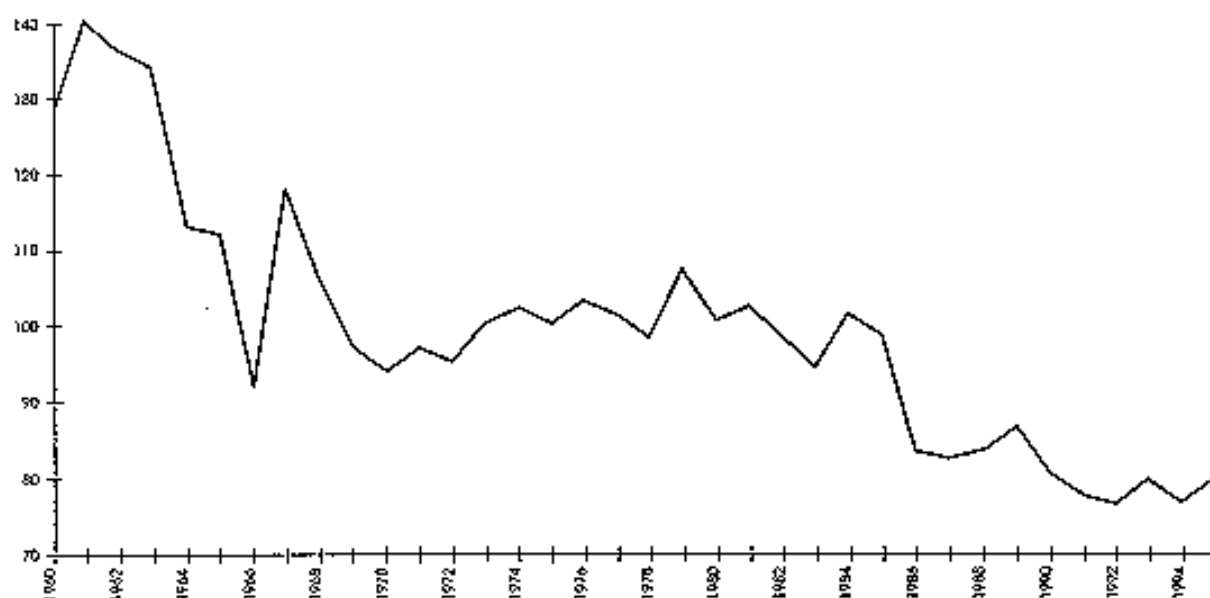
There has been a rise in the average skill-intensity of output in the North (documented for example by Lawrence and Slaughter, 1993). This of course must be so, given the large rise in overall relative skilled employment cited above. But it is far from clear that it reflects a rise in skill-intensity in given sectors over time, if the nature of firms’ activity is controlled for. It could merely reflect an aggregation problem: within any given aggregate category are contained disaggregated categories with different skill-intensities and there could be ‘out-sourcing’ of those requiring less skill, reflecting the overall shift towards ‘services’ dictated by industrial countries’ comparative advantage. Unfortunately this problem is impossible to control for; even at the level of the firm the nature of activity can change markedly (as the firm goes ‘up the value-added chain’), let alone within the same general activity classification. Feenstra and Hanson (1995) have tested for such an

effect, as proxied by the share of LDC imports in trade and found it highly significant in explaining rising skill-intensity. Bernard and Jensen (1994) find that the share of exports also explains rising skill-intensity in US manufacturing. In Lawrence and Slaughter's own data, the same interpretation is supported: as the level of disaggregation increases, the change in skill-intensity becomes more closely related to the change in relative skilled wages.

Data on the skill-intensity of output in the South is scarce. In any case it too would suffer from potential aggregation bias, as output has shifted towards manufacturing.

World prices of manufactures exported by LDCs have fallen relative to those of services and complex manufactures ('services') – Figure 4. Some uncertainty surrounds this index in the years up to 1975. Owing to the effects of sharp movements in non-ferrous metals prices (Rowthorn, 1996; Athukorala, 1993; Sarkar and Singer, 1993). Our index gives an estimate of the trend from 1960 that is in the middle of this range of possibilities.

FIGURE 4
LDC Manufacturing Prices Relative to Services and
Complex Manufactures



Primary product prices have risen in real terms in the 1970s and fallen during the 1980s: this applies particularly sharply to crude petroleum, but it applies also, if far less dramatically, to other primary products. The net effect of these two decadal swings has been an overall increase of about a third in real oil prices but a real drop of some 40% in other primary product prices. Thus depending on exactly how one weights these two components one could say that for primary products as a whole there has been little net real change since 1970. For the record, we have created a joint series, using 50/50 weights based on shares in world exports: relative to the index of complex manufactures and services described above this index shows a moderate decline of aggregate primary producer prices over the period 1970-90 – Figure 5.

Throughout this period the North has been a net exporter to the South of complex manufactures and services while the South has been a net exporter to the North of primary products. During the 1980s the North switched from being a net exporter of basic manufactures to being a net importer.

FIGURE 5
Real Commodity Prices



This shift in comparative advantage goes hand in hand with a huge growth in total trade between North and South, as a percent of Northern GDP: the South became much more important as a trading partner for the North. In particular, Southern exports of manufactures (basic and complex) have risen from a negligible 0.2% of Northern GDP in 1970 to 2% in 1992, accounting for over 10% of all Northern visible imports.

¹ Named after the two Swedish economists, Eli Heckscher (1919) and Bertil Ohlin (1937), whose work was complemented by the American Paul Samuelson's essays in 1948-49 on factor price equalisation. The Heckscher-Ohlin component of the model states that a nation will export the commodity whose production requires the intensive use of the nation's relatively abundant and cheap factor input (and vice versa for imports). Samuelson's addition is that the international trade so generated will bring about equalisation in both the relative and absolute returns to inputs if all countries have the same technology. (Thus identically unskilled workers in two economies, an advanced and a developing one, will, when the process is played out and the developing country has acquired the technology of the advanced one, receive identical wages.) - Ed.

4

Simulations of the North-South model

To explain these facts we use a two-country HOS model of North and South. The basic idea in our HOS model is that these have different stocks of resources fixed so to speak within their borders: notably, land and labour, which we may divide into unskilled (or with no skills that are in special demand) and skilled. Capital and raw materials do not properly belong to this category because they can be bought and sold on an international market – they are ‘traded’ or ‘mobile’. For example if you want capital, you can borrow at a world real rate of interest and buy the capital goods you need from whoever produces them.

These resources are then employed in competitive industries which have fully exploited all increasing returns to scale: hence each has constant costs and its price is driven to equality with those costs. We assume technology is more advanced and productivity higher in the North than in the South. We identify the non-traded sector and three traded industries – primary, basic manufacturing, and complex manufacturing which we lump together with traded services as being skilled-labour intensive. Like Ricardo HOS assumes full employment, but this can be relaxed along the lines we have already discussed: if you are willing to pay a resource more to be idle than it is worth at work then you will get unemployment. We will allow for this in the theory, so that the ‘supply’ of the resource will not be given merely by physical availability but also be affected by such social policy. In particular, unemployment depends on the relation between wages and benefits, the social reservation wage.

Table 3, in which the key facts are shown in the left-hand column, shows in the next eight columns the simulations we now proceed to discuss.

The first three have been adduced as particular reasons for the plight of unskilled workers in the OECD: in order, the ‘emerging market’ shock of low-wage competition that has so worried politicians in Europe and the USA (col. 1), and technology bias against unskilled workers in the North (col. 2). Then we consider the effects of other shocks that we know were occurring over this period. First, rising ‘social’ protection of unskilled workers (col. 3); a policy shock that is closely connected with our discussion of European social protection and labour inflexibility. Then in col. 4 we simulate the huge expansion of higher education evident in our data on OECD skilled versus unskilled workers in the labour force. In columns 5 - 7 we simulate productivity growth in other sectors of the South and finally in col. 8 the OECD’s own productivity growth (which we identify as the result of technology creation as opposed to the technology transfer of the emerging market hypothesis). This full menu of shocks, though not all are of primary interest here, must be included to give a convincing overall account of the facts; no doubt others could be adduced, but these appear to be the key influences likely to affect the critical ratios examined here; and indeed we find that together they give a pretty good fit to the trends we are trying to explain. We go through each of the shocks and their simulated effects in turn.

The emerging market shock

When a country ‘emerges’, we mean that it enjoys:

- (1) a high rate of inward investment
- (2) fast growth, primarily in manufacturing
- (3) low labour costs.

The countries involved include many in South East Asia, in Latin America, as well as in other parts of the developing world. It is presumably nowadays the aim of other poorer countries, like South Africa, to join this elite corps.

Japan was at one time an emerging market on this definition; but in this paper the focus is on events since 1970, and especially from 1980. Most of Japan’s phenomenal post-war growth had

happened by 1970 and by then it was a rich country. It is now as affected as other OECD countries by the locational attractions of the Pacific Rim. We therefore include Japan throughout in the OECD or 'North'.

We assume in what follows that the elements of (1) - (3) are linked: that the inward investment is profitable because of low labour costs allied to the investor's own techniques of production and is devoted to the production of manufactured goods which thereby grows rapidly. Before their emergence these countries were ordinary 'developing countries'. Why would they change, as if by taking some elixir of growth? In another paper (Minford, 1996) I suggested that it is due to a combination of property rights, a basic infrastructure, easier communications technology, and greater computer-control of factory processes: clearly that suggestion – close in spirit to the 'openness' of Dollar (1992), the 'business capital' of Parente and Prescott (1995), as well as the 'transactions-reducing features' of North (1994) – would require much to establish. For our purposes here we appeal to some such set of factors that turn an economy from one in which inward investment is relatively unattractive (for all the low labour costs), to one in which the high profitability of using low-wage workers becomes a magnet for it.

Given such conditions of emergence we visualise the process of inward investment as using the parent firm's technology and so transferring it to the emerging market economy. This transfer raises the labour productivity of the host sector, and hence if wages are lower there, creates an excess return for inflowing capital.

The first shock we consider is that of progressive technology transfer to the manufacturing sector of the South. The results of a 0.5% p.a. (maintained from 1970 to 1990) rise in Southern manufacturing productivity are shown in column 2.

The outline of the simulation is as follows. Supposing manufacturing productivity in the South (in the less complex manufactures which it can produce) rises steadily: Southern wages rise drawing unskilled labour (usually out of low-productivity tasks in the agricultural sector) into manufacturing, whose supply rises, driving down the prices of these less complex manufactures on world markets. As OECD producers of these goods compete with this new output at falling prices they are only willing to pay lower wages for the unskilled workers that are heavily required for such industries. Meanwhile rising demands from the emerging markets for the things the OECD has an advantage in supplying – viz. complex manufactures such as machine-tools and complex services such as merchant banking or Hollywood – drive up their prices on world markets; OECD producers of these bid up the prices of the skilled labour they need to supply them. The overall result is an improvement in the terms of trade of the OECD *vis-a-vis* the emerging markets and a fall in the wages of unskilled workers relative to those of skilled workers.

Turning to the details and comparing column 1 with the facts we can see that the direction of the effects are, strikingly, all the same, suggesting that qualitatively we have here the basic elements explaining world behaviour in this period. The North shows falling relative unskilled wages and employment, deindustrialisation and rising unemployment. The South shows industrialisation, rising relative unskilled wages and employment. At the world level prices of basic manufactures fall relative to those of services while the North's trade balance in basic manufacturing with the South deteriorates.

However we must also consider orders of magnitude, rough as our estimates of many of these magnitudes necessarily are. Here there are difficulties, especially in the case of production and trade volumes – as noted by Krugman (1995) – but also in the case of relative unskilled employment in the North. Column 1, for a 0.5% p.a. rise in Southern manufacturing productivity, fits the other elements roughly. But it shows a decline in Northern manufacturing about five times the actual, a rise in Southern manufacturing thirteen times, and a manufacturing trade balance decline nearly forty times; and the decline in relative unskilled employment in the North is about a tenth of the actual.

It is this mismatch of volume effects that has been picked up in the factor content studies done hitherto – such as Sachs and Shatz, 1994, and Wood, 1994 – in order to assess the impact on OECD employment. These studies are partial equilibrium in nature but, much as Krugman (1995) with a

simplified general equilibrium estimate, we have found a similar mismatch at the general equilibrium level.

The technology bias simulation

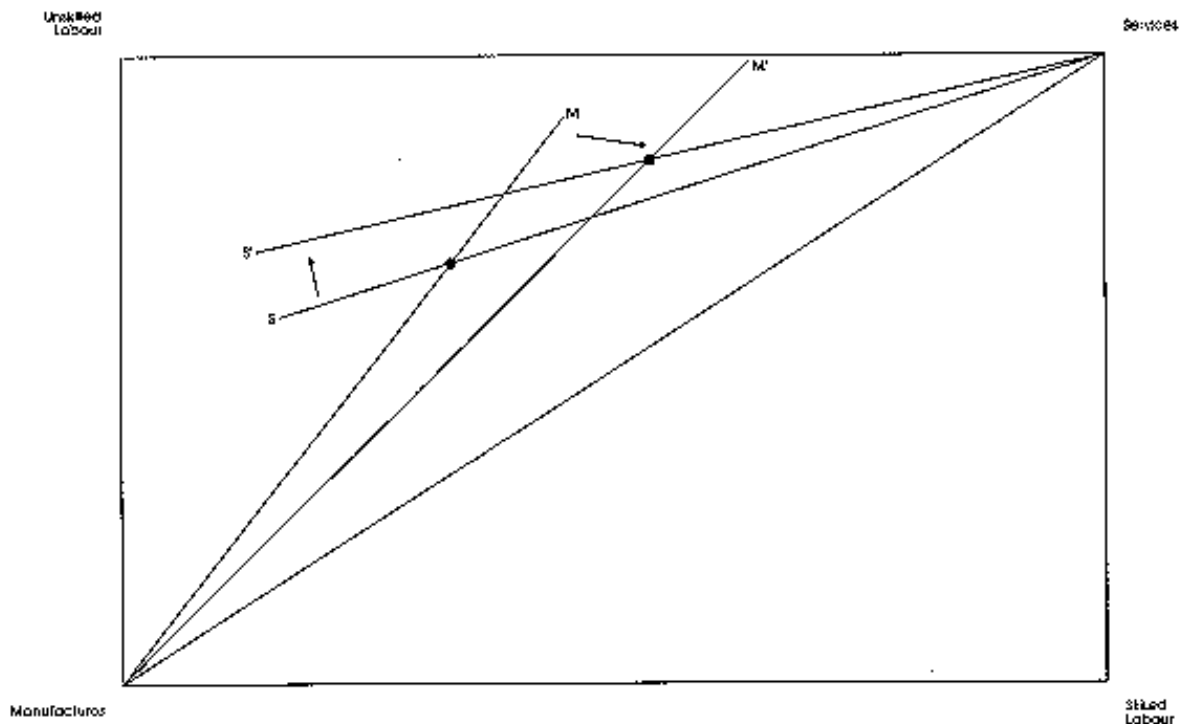
We now turn to the main alternative explanation of recent world trends: that there has been a technology bias shock, whereby technology has shifted away from unskilled to skilled labour in the advanced Northern countries, mainly due to a global revolution in computer technology.

Let us think about the impact, or first round, effect with all prices unchanged. The technological shock shifts factor proportions in all industries away from unskilled labour, creating an excess supply of it. This excess supply stimulates a rise in the production of unskilled-intensive goods – basic manufacturing. The expansion in the North of basic manufacturing leads to an excess supply of it on world markets – the opposite for services and agriculture. Manufactured prices fall, driving down the wages of unskilled workers and raising those of skilled workers and land, in both North and South. The result is a familiar contraction of unskilled employment in the North, but also in the South. In the South manufacturing output falls too in consequence, while services and agriculture rise. (This is, aficionados of HOS will note, the Rybcynski Theorem in operation as illustrated in Figure 6.)²

The results, in column 3 of the Table, show considerable variation of direction compared with the facts in column 1. They correctly predict falling world relative prices of manufactures. But though as well they correctly predict falling relative unskilled wages and employment in the North, they also predict the same in the South, contrary to the facts. Their predictions of the production and trade effects are similarly contrary: the North's production of basic manufacturing is predicted to expand, that of the South to contract, and the North-South trade balance in manufacturing to improve. The orders of magnitude on trade and production are also both contrary and substantial.

We should not conclude from this that technological bias plays no role. On the contrary, as we will argue below, a combination of column 2 with column 1 and other shocks to the world economy can fit the facts where no individual hypothesis can.

FIGURE 6
The effect of technological bias against unskilled labour in the OECD,
at constant product and factor prices



A labour market regulation shock

We noted above the divergence of labour market experience between ‘European’ and ‘Anglo-Saxon/Oriental’ countries of the North. So far we have mainly commented on common features, except to note that if countries resisted the drop in unskilled wages by regulation of the labour market (such as minimum wages, strong unions, and unemployment benefits) then they would produce a disequilibrium collapse of those traded industries facing global competition. The workers displaced would be prevented from reducing wages. A way of simulating this process is to raise unemployment benefits: this raises the reservation wages of unskilled workers and contracts their supply, so raising equilibrium unskilled wages and reducing labour demand in line.

Column 3 shows the result of a 1% p.a. rise in Northern unemployment benefits. This reduces unskilled labour supply. Because unskilled wages are bid up, there is a knock-on ‘wage differential’ effect on skilled wages. This also produces a decline in skilled labour supply, as skilled wages permitted by global competition cannot keep pace with the higher skilled wages demanded. Because the economy shrinks with reduced labour supply, non-traded demand and so production falls and there is an absolute contraction of the traded sector. Because the supply of unskilled labour contracts by the largest proportion, the manufacturing sector contracts disproportionately. Overall, therefore the policy raises real wages for unskilled workers but at the cost of rising unemployment both of unskilled and skilled workers.

We have here an explanation not merely of high unemployment generally in the North but also of the divergent unemployment in the European countries, an explanation essentially similar to that used above to discuss UK unemployment. These countries, by attempting to stabilise wages of unskilled workers, have raised unemployment across the board, not merely among the unskilled – because the upward pressure on unskilled wages has spilled over into the skilled labour market. We can think of the North as an average of the European and Anglo-Saxon/Oriental, with the former suffering a disproportionate amount of column 4 effects.

In a country of the South, like South Africa, the equivalent process would be set off by raising urban wages through social protection and strong unions. This has the effect of raising the reservation wages of workers in manufacturing and primary processing; and also those of workers

in agriculture because of the extra attraction of urban immigration. Higher equilibrium wages are produced all round as labour supply is diverted into high equilibrium unemployment.

Two other OECD labour market shocks

– technology creation and education

– and productivity in other Southern sectors

Columns 4 and 8 of Table 3 show respectively the effect of a 1% p.a. fall in the supply curve of unskilled workers in the North (matched by a 3% rise in the supply curve of skilled workers) due to the spread of higher education; and of a 0.5% p.a. rise in general Northern productivity (Total Factor Productivity) – with a slight bias against primary and non-traded dictated by the constraint that it be broadly neutral across sectoral shares of GDP.

Column 4 shows the effect of the shift of supply towards skilled workers due to the spread of higher education. This shifts Northern resources out of manufacturing into services, driving down world service prices and raising the relative wages of unskilled workers whose unemployment in the North also falls accordingly. The rise in relative manufacturing prices shifts resources in the South out of services into manufacturing, replacing that in the North. Living standards rise in both North and South, in the North because skilled workers earn more, and in the South because of the favourable movement in the terms of trade.

The general productivity increase (col. 8: 0.5% in manufacturing, 0.625% in services, 0.28% in primary, and 0.395% in non-traded – 0.5% overall) was restricted to be approximately neutral across sectors (ie to leave sector output shares constant) and also relative factor and goods prices, with the added restriction that nontraded productivity growth be less than that in manufacturing (a well-documented phenomenon). It has its effect very largely in the North because by construction it leaves sector shares broadly unchanged and similarly has a minimal effect in disturbing relative prices and quantities. However within the North it raises living standards and by raising wages relative to benefits reduces unemployment both generally and among unskilled workers particularly.

In addition, we examine the effects of possible productivity growth in other sectors of the South – primary, non-traded, and services. These are shown in columns 5 - 7. All of course raise living standards in the South but have contrasting effects on sectoral shares.

The effects in the primary sector are to depress the relative price of primary products and primary supply in the North while boosting that in the South, with corresponding offsetting movements in the other two traded sectors.

Those in non-traded expand the South's non-traded sector at the expense of primary and manufacturing. Effects on relative traded prices and so on in the North are minor.

Those in the services sector expand Southern services and also manufacturing at the expense of primary production. Relative prices of services fall causing a reverse movement in the North.

2 An implication of HOS theory, the Rybczynski theorem, postulates that at constant commodity prices, an increase in the supply of one factor will augment, by a greater proportion, the output of the commodity intensive in that factor and will reduce the output of the other commodity. Thus in Figure 6, if the relative availability of unskilled labour in the OECD rises (because of technological advance biased against labour so that the ray M pivots to M^1 and the ray S pivots to S^1) basic manufactures rise as a proportion of output. But, the theorem continues, output of the other commodity services, will drop. The point of intersection (M^1, S^1) shows the new proportions (further from the manufacturing origin, closer to the services origin). But now if world prices vary, because of these changes in output, the results postulated by the author can follow. - Ed.

5

Assessing the importance of the various shocks

We have identified eight key shocks disturbing the world economy in the past two decades, 1970 - 90. What are the contributions of each? In the literature to date, they have been assessed in relation to partial data, even when a general equilibrium approach has been used; for example, Krugman (1995) looks solely at trade flows, Lawrence and Slaughter (1993) solely at American data (some of it rather idiosyncratic – Minford, 1996). We have made an attempt in this paper to gather data on all relevant aspects of the world economy – factor prices and shares, production shares, unemployment, living standards, trade patterns, and relative prices. The data has its deficiencies but it is the best available to our knowledge. In principle we would like to give all of it at least some weight in our assessment.

In Table 4 we present an unrestricted OLS regression of the facts on the various shocks in columns 1 - 8. It can be seen that all shocks contribute with appropriate signs to the explanation, only Southern service productivity being quite insignificant.

TABLE 4: Regressions of Actual on Simulated

Simulation (*)	Unweighted Regression Coefficients (S.E.)	Weighted Regression Coefficients (S.E.)
1. Trade	1.46 (0.65)	1.61 (0.75)
2. Technology	1.23 (0.36)	1.55 (0.36)
3. Benefits	2.17 (1.28)	1.76 (0.99)
4. Higher Education	0.65 (0.19)	0.62 (0.19)
5. Southern Primary Productivity	0.53 (0.36)	0.76 (0.42)
6. Southern Non-traded Productivity	3.64 (1.13)	2.99 (1.02)
7. Southern Services Productivity	0.25 (0.86)	1.36 (1.00)
8. Northern General Productivity	2.25 (1.05)	1.66 (1.03)
R^2	0.92	0.88
R^2	0.87	0.81

* Columns 1 - 8 of Table 3.

Table 5 shows the prediction of this unrestricted regression for the key variables. Certain important facts are not picked up well, notably all those relating to Northern sector shares and in consequence trade shares. These failures could be remedied by using weights on the facts for importance and reliability. We may note that we doubt the reliability of the Southern relative unskilled employment and wage estimates, while clearly we must give great weight to the sectoral shares not just because they are reliable but mainly because a 0.1% error on a sector share is more serious proportionately than a 0.1% error on living standard growth.

TABLE 5: Actual and Predicted, with and without Weights

% Change p.a.	Actual	Unweighted Regression Predicted	Weights for Weighted Regression	Weighted Regression Predicted
1970-1990				
<u>North</u>				
<i>Unskilled/Skilled:</i>				
Wages	-0.9	-0.984	2	-0.96
Employment	-4.2	-4.209	1	-4.216
<i>Shares of GDP:</i>				
Manufacturing	-0.22	-0.604	8	-0.262
Services	+0.195	+0.738	8	+0.351
Primary	-0.075	-0.079	8	-0.042
Non-Traded	+0.1	-0.038	8	-0.037
<i>Unemployment</i>				
Unskilled	+0.4	+0.418	3	+0.414
Total	+0.2	+0.155	4	+0.172
<i>Living Standard</i>	+2.2	+2.051	1	+1.918
<u>South</u>				
<i>Unskilled/Skilled:</i>				
Wages	+2.3	+1.437	0.5	+0.062
Employment	+1.3	+1.097	0.5	+0.936
<i>Shares of GDP:</i>				
Manufacturing	+0.1	+0.318	3	+0.038
Services	+0.14	-0.649	3	-0.116
Primary	-0.55	-0.478	3	-0.444
Non-Traded	+0.36	+0.809	3	+0.522
<i>Living Standard</i>	+1.1	+0.952	1	+0.963
<u>World</u>				
<i>Relative Prices:</i>				
Manufacturing / Services	-0.8	-0.242	2	-0.31
Primary / Services	-0.3	-0.391	1	-0.493
<i>North Trade Balances / GDP:</i>				
Manufactures	-0.025	-0.418	9	-0.123
Services	+0.005	+0.421	9	+0.082
Primary	+0.02	+0.024	9	+0.065

Table 5 also shows in the final column the predictions of such a weighted regression recognising such considerations; they appear to remedy the failures of the unweighted regression. This best-fit regression identifies the following factors as being at work (Table 4):

- 0.8% p.a. rise in Southern productivity in manufacturing ('trade')
- 1.5% p.a. fall in the factor share of unskilled labour in all Northern sectors ('technology bias')
- 0.8% p.a. rise in general Northern productivity
- 1.75% p.a. rise in Northern benefits
- 0.62% p.a. fall in unskilled labour supply
- other Southern productivity growth (%p.a.): 0.4 in primary, 1.5 in non-traded, 0.7 in services.

What this implies is that both trade and technology play a large and significant role in explaining Northern labour market problems. For example two fifths of the collapse in Northern unskilled employment is explained by these two factors (higher education explaining the bulk of the rest); and of that two fifths just under 60% is due to technology, just over 40% due to trade. If we take the fall in relative unskilled wages, the downward pressure exerted by these two factors is in the same proportion – 60/40. The same is true of unskilled unemployment, where the rest of the explanation is due to the effect of benefit-equivalent changes, partially offset by higher education in shrinking unskilled supply.

6

Policy conclusions

What our elaborate calculations show is that the emergence of developing countries and their low-wage competition has on its own produced a huge impact on the wages of unskilled workers, relative to skilled. An impact of a similar size has come from technological change biased against unskilled workers. However, these impacts have been partially offset by other developments: general productivity growth in the North and the expansion of higher education. The equivalent effects (not shown here but available from the author) on real unskilled wages in absolute terms of low-wage competition and technology bias are also huge, and these have been more than offset by the other developments, producing a modest overall growth of real unskilled wages for the OECD as a whole. Looking to the future, we have speculated that, so low now is the pool of unskilled labour, normally rising demand for it in the non-traded sector (the indirect effect of general productivity growth being fastest in the traded sector) may start to provide a powerful offset.

However that may be the policy implication for a western country are clear. Policies that stimulate productivity growth are helpful. Not only do they raise unskilled real wages but they also reduce unemployment both generally and particularly among the unskilled. Such policies are those of free markets.

So are policies that raise higher education and skill levels. These, by inducing scarcity among unskilled workers, lower their unemployment and raise their real wages, while also raising living standards overall.

Policies that raise social protection are damaging. They raise unemployment not merely among unskilled workers but overall. They lower living standards overall, even if they do slightly raise the real wages absolutely of unskilled workers who retain their jobs. These policies have their effect by increasing the inflexibility of the labour market.

When we apply these ideas to the policies adopted on the European continent, we find that it is no real surprise that in the face of the severe shocks to the world environment of the past two decades European unemployment has risen so sharply, and that European productivity growth has slowed down. Even though there has been a large rise in higher education, this has been accompanied by policies of heavy state regulation, intervention and taxation and in particular strong social protection in the labour market.

When we turn to South Africa, with its very different endowments and history, we find similarly that policies of heavy regulation, social protection and unionisation are blighting the possibilities of rapid employment growth, falling unemployment and emerging market status. In effect, though explicit wage costs are as yet quite low, there is strong pressure to raise them, and in addition the strong and growing power of unions embodies a high implicit cost for inward investors, the risk of expropriation by unions through the strike weapon.

Policy and social welfare

It is often claimed that policies of welfarism, social protection and so on are necessary in order to achieve democratic acceptability: free market policies are just 'too tough'. However, the experience of the UK, most of the countries of East Asia and by now the generality of the Anglo-Saxon world contradict this idea. On the contrary it is the countries which adopt heavy intervention and wind up with high taxes, high unemployment and slow growth that have the social problems and democratic discontents. I would suggest that this is because people are tolerant of a 'tough' environment if it will produce good long-term consequences: in short they have a long time horizon which embraces their families' and descendants' futures as well as their own.

This is not to say that reforming an economy is easy: far from it. Human organisations evolve through failing to be blocked by some internal coalition; democracy is an effective organisation

because its voting procedures allow decisions to be blocked before enactment so that the whole organisation is not brought down. In modern society the mechanisms available to quite small groups to block decisions are various and potent because of high interdependence and the cheapness of powerful technologies (such as terrorist weapons and communications). This means that reforms must be acceptable broadly enough to avoid being blocked by powerful minorities.

Let us close by considering the implications of these two ideas for policy: on the one hand the long time horizon of individuals and on the other the extreme interdependence and hence widespread blocking power in modern society. I have no interest here in what 'ought' in some moral sense to be done by policy-makers; rather the question is what policy-makers must do in order to succeed and for their policies to survive.

What this implies I suggest is the criterion that successful policies will on the one hand promote long term dynamism but on the other will not be blocked by a coalition.

This criterion is quite different from what one often encounters in discussions of policy, namely appeals to 'social welfare'. Attempts are made to evaluate some definition of this, say the monetary income of all households, weighted in some way. But of course this tells us nothing about whether the policy will succeed. Our criterion requires evaluation of the power of different groups and of their attitude (related no doubt to some measure of that group's welfare) to the policy.

In practice because so many groups can block, this leads one to a 'no losers' principle side by side with demonstrable benefits to at least some group, preferably as large as possible. This is a practical restatement of Pareto's principle of improvement – that some should gain while no one should lose – but in group form where groups are defined by their power to block and their commonality of response to the policy.

It follows that the art of policy-making, say in economic matters, is finding improvements in economic efficiency – by which we mean that more value is produced from the same resources – and then varying their exact form in order to avoid damage to politically dangerous groups, often a wide class. The first part of this problem is often the easiest; it is the second part that poses the biggest challenge without sacrificing too much of the efficiency gain.

However two things can help. First, the increase in freedom is itself attractive to most people, who do not like to be compelled. Indeed psychologists have discovered (Sutherland, 1992) that people even take a dislike to situations they would voluntarily have chosen, if they are forced into them; it follows that there is a premium of attractiveness attached to what is freely chosen.

Second, people's long-term horizon will often help. If people can see that their children will benefit from the higher efficiency, they will weigh this against the damage to themselves. Hence if one can show that changes will produce faster long-term growth for example, that can be a powerful argument for reducing opposition among immediate losers.

A further useful element is to recognise 'grandfather rights'. These are the existing benefits enjoyed by interested groups – such as sitting tenants under controlled rents. They can be granted continued enjoyment of these benefits for their own lives until they give them up voluntarily (eg by moving); but they cannot pass it on. They are likely to accept the change – eg rent decontrol – because they will not lose and their children would (a) probably not have wanted to inherit the right (b) gain from the better operation of the economy. Therefore the policy will apply to new entrants only; this plainly defers the full efficiency gain but it preserves some of it in the short term (often the most important part, since new entrants will be the most active economically) and all of it in the long term. This technique was used widely in the British reforms of 1979 – 97 (e.g. in the rent decontrol of 1988 and in the privatisation of British Telecom and British Gas).

These points are well known to civil servants and indeed politicians. But they often surprise economists and other social scientists who focus on measures of social welfare and expect these to carry all before them. As we have seen measures of general improvement of efficiency are relevant – though these are not the same as many proposed measures of social welfare. Social scientists can advise on these and also on the modifications that can make a policy acceptable to blocking groups without removing the overall gains entirely. This is an important role to which the modern tools of social science can make a big contribution.

Final thoughts

In this *Monograph* I have discussed some elements in recent work of my own research team as well as of some others, that I hoped would be relevant to South Africa's current problems: namely Britain's experience of radical free market reform and the process and consequences of emergence across the international economy. I ended by suggesting that free market policies, though 'tough', could with some ingenuity in transitional construction be acceptable, even popular. The relevance for South Africa of all this is, I suggest, that there needs to be substantial liberalisation, especially of the labour market, to generate the dynamism of an emerging market and rapidly falling unemployment; and that this can be popular here too.

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