TECHNOLOGY, JOB CREATION AND UNEMPLOYMENT
CONTRASTS OF U.S. AND EUROPEAN EXPERIENCE

A Report on Wilton Park Conference 279

by

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EXECUTIVE SUMMARY

In these complex and economically very unstable times the U.S. Economy has, for various reasons, been able to generate a relatively large number of new jobs. The same does not apply to Europe, for reasons such as:

- lack of entrepreneurship
- absence of labour mobility and flexibility
- lack of preparation for 'business' futures
- general attitudes towards jobs and work itself
- social and cultural factors counterproductive in mobility and change.

Over the past 34 years, in the U.S. the number of jobs increased by 77% compared to only 10% in Europe. Over the past 11 years the U.S. has created some 20 million new jobs, whereas Europe lost over 1.5 million. Also, U.S. manufacturing productivity, measured by the average annual change in unit labour costs has improved dramatically compared in most of Western Europe. Economic growth in the U.S. has also been very much stronger than that of Europe, as well as outstripped that of Japan for two years running. Both upheaval in many markets and rapid technological change have given people new opportunities in the U.S. Also, deregulation of transport and telecommunications sectors of the economy have proved to be a boon for many entrepreneurs, as have various tax policy revisions.

Flexibility and mobility of labour are lacking in Europe, whereas resistance to social and technological change is very strong. European workers in declining industries have been far more resistant than their U.S. counterparts to accept retraining and changes. European leaders are loath to try to remove the bedrock of protective legislation, hence creating economic flexibility on the U.S. scale in Europe would require a social revolution.

Paradoxically, European economies have increased output and unemployment simultaneously. Being employed in Europe has been a "good deal". However, since 1970 the U.S. labour force has grown 37%, whereas in the Federal Republic of Germany, for example, the number of would-be workers has grown merely 4.2% in the same period, while jobs actually dropped 3.8%. Much of the resulting unemployment is long-term. Two-fifths of all French jobless people have been out of work of more than a year, while in the U.S. the comparable figure is less than ten percent. European economies continue to be run for the benefit of the employed at the expense of new workers.

Unemployment is, and could remain, a serious problem. Jobs do not materialize out of thin air. They flow mostly from what is sometimes diparagingly referred to as the market; i.e. firms and individuals seeking opportunities to produce and or sell something at a profit. This process is difficult to 'program'. Also, the economy is too complicated and business opportunities often obvious only to those who exploit them. The role for government policy should be to try to reduce the severity of the business cycle while fostering a climate in which individuals and firms would want to expand their activities.

Jobs must be created, preferably by the private sector. Attitudes as well as perceptions must change drastically for this to come about. A gap seems to be developing at present between the U.S. and Europe regarding many aspects of fiscal and/or monetary policies, as well as basic perceptions underlying much economic and social life. The tradition of governmental intervention has been much stronger in Europe than in the U.S., although this, also, may be changing. If, in the future - as the Rand Corporation and the Hudson Institute tell us - some 2-3% of the (U.S.) labour force may be able to do all the work, what will happen to people? Even if these long term projections may be exaggerated, the problems are serious enough to merit close attention. Co-operation is needed for these and other, including security related, reasons. This is no time to allow a serious gap of basic, underlying perceptions to develop between groups of like-minded countries who share a democratic heritage.

FOREWORD

Wilton Park Conference No. 279 on "Technology, Job Creation and Unemployment" was unique in several ways. It was an extremely timely conference on a very important subject. The interest in it was much greater than even the organizers had anticipated, hence additional space of accommodation had to be obtained. The conference was co-sponsored by the U.S. Mission to the European Communities which indicates the interest attached to it from the North American side. Finally, the presentations, particularly the key address, were of very high quality representing near to official positions on increasingly urgent issues. For these reasons detailed coverage of the more formal part of the conference is merited.

LIST OF TABLES AND CHART

TECHNOLOGY, JOB CREATION AND UNEMPLOYMENT: CONTRASTS OF U.S. AND EUROPEAN EXPERIENCE

A Report on Wilton Park Conference No. 279

AIMS OF THE CONFERENCE

This conference, which took place at Wiston House, Steyning, U.K., 27-31 May, 1985, attempted to explore the relationships - on both sides of the Atlantic - between New Technology, Job Creation and Unemployment. One of its aims was to compare and contrast the experience which had been encountered in the U.S. as well as in Europe, and to attempt to draw some general lessons, if any could be drawn.

Whereas it has been generally assumed that the U.S. economy, for a wide variety of reasons, has been able to produce a very large number of new jobs (in the millions) over recent years, the same cannot be said for Europe, at least as far as public perceptions of things are concerned. Is this in fact correct? If so, which types of jobs have been - and are being lost and which new types have been - and will be created? Has their creation in the U.S. been due to New Technology; to differences in tax regimes; institutional or organizational characteristics which may vary; or to differences in fiscal and/or monetary policies? Or is it caused by something much more profound and basic, such as fundamental differences in perceptions of and attitudes towards work itself? If the latter is the case, and if there is a gap in this respect between the U.S. and Western Europe, is this gap narrowing or widening? What causes it, and what are some of the implications of this process?

ORGANIZATION

The conference was organized by the Wilton Park staff on the initiative, and with the collaboration, of the U.S. Mission to the European Communities. There were eight plenary sessions, two discussion groups with the participation of Wilton Park staff members, and an extramural session. This conference had drawn considerable attention on both sides of the Atlantic, hence participation was heavy, with particularly large delegations from the U.S. and the Federal Republic of Germany. So much attention had been paid to this conference from the U.S. and Europe that the size of the total group of delegates outgrew the capacity for accomodation by Wiston House, hence two private hotels in the vicinity had to be utilized to accommodate the more than 10 "extra" participants. A list of delegates, their affiliation and background is appended to this report as Annex 3 and participating Wilton Park Staff as Annex 4.

Certain changes have taken place in the organizational format of Wilton Park conferences in recent years, and differences are quite obvious to anyone familiar with the Wilton Park system, its intent, overall content and goals. The new format stresses shorter conferences, one working week only, exclusive of week-ends, running from late afternoon on a Monday (as opposed to, as earlier, Sunday night) until midday Friday (in contrast to early Saturday, as done previously). The two week conferences, some of which had been extraordinarily interesting, detailed and useful, are - for all purposes - out, and may probably never be seen again. Even the 40th Anniversary Conference, appropriately entitled "Germany in a Divided Europe in a Divided World" (bearing in mind Wilton Park's original mandate) will only be within the new format of a shortened version, although some additional festivities are anticipated on the following Saturday (14 December 1985).

Another organizational change, which represents a break with the past is the introduction of a large rectangularly arranged table, instead of the traditional easy chairs in a semi-circle, in the main conference room for all plenary sessions. The impact upon the proceedings and, more importantly, on the atmosphere of the conference is noticeable for anyone who has previously taken part in Wilton Park sessions. There is now an increased element of 'efficiency', but also formality present in these conferences. Whether or not it enhances (or runs counter to) the originally intended purposes of Wilton Park sessions remains to be seen. It is quite clear, however, that as things change, so must we. Perhaps the note of urgency which is introduced by compressed sessions and more formal conference procedures will be helpful to get us properly introduced to the quickening pace of change. For the present conference this seemed to be quite appropriate and as such an asset.

KEY THEMES AND IMPRESSIONS

As may have been expected, there was a fairly heavy American presence evident in the planning and proceedings of the conference itself. This was probably deliberate and may have been necessary to trigger off a successful series of sessions on this particular topic. It quite soon became obvious that a gap seems to be opening up between current U.S and European thinking about jobs, unemployment and social security. Some of the U.S. presentations, especially the opening key address, tended towards "lecturing" the Europeans on their "wrongs" and inadequacies in this respect. In all fairness, there was also, from several Europeans present, to a large extent, agreement with many of the claims set forth by the U.S. delegates. However, at times the "message" came on a bit too strongly to be fully successful, seemingly, hence it could backfire. Private discussions with many of the delegates (U.S. representatives as well as Europeans) tended to confirm this view. However, this may have been intentional.

More importantly, perhaps, is the fact that there seems to be developing a general lack of understanding between the two groups about many aspects of their respective societies, specifically some of the key underlying social and cultural assumptions. This trend, if it continues unabated, is potentially more troublesome than any talk about new technology and job creation per se.

THE SESSIONS

The Keynote Address

The first, and by far the most important keynote address from the U.S. side as it completely set the stage and dominated the rest of the conference, was a presentation by Mark Bloomfield, Executive Director of the American Council for Capital Formation. The presentation took place Monday 27 May, late afternoon almost immediately after the arrival of the delegates and the very brief opening and administrative remarks by the Wilton Park Director. Dr. Bloomfield, a well known economist, spoke on "The U.S. Experience", followed by an open discussion (20:30-22:00). He has been Secretary of President Reagan's Task Force on Tax Policy, and is a founding member of the Budget Central Working Group, a business-sponsored coalition whose purpose is to "restrain the growth in Federal spending" as well as the Carleton Tax Group, described as "an elite group of business tax analysts". Dr. Bloomfield has published and lectured quite extensively on questions of tax policy, economics and politics.[1]

In a dynamic and forceful style Dr. Bloomfield started his presentation by outlining what he saw as the four key factors explaining the U.S. relative success. These were:

- The spirit of entrepreneurship;
- Flexibility and mobility of labour, enhanced with the large percentage of a work force which prepares itself for a career in business;
- A relatively high level of R&D outlays;
- Correct fiscal and tax incentives to encourage job growth and investment opportunities.

He then proceeded to draw a background comparison of the U.S. and Europe in terms of job creation, unemployment, productivity, economic growth, and share of gross domestic product allocated to government. The rest of his presentation consisted in a carefully set out comparative analysis of causes, effects and possible implications for both systems. Not all had been "beer and skittles" in the U.S., according to Dr. Bloomfield. The economic and political factors which are causing problems for the U.S. economy, as he saw them, are the federal budget deficits, the high value of the dollar, and the impact of new tax proposals which would raise the cost of capital.

The difference between job creation in the U.S. and Europe has been striking over the past 34 years. In the U.S. the number of jobs increased by 77% compared to only 10% in Europe. Over the past 11 years the U.S. has created some 20 million new jobs, while Europe lost over 1.5 million. In a tabular form, this development could be expressed as follows:

Table 1: Employment in selected OECD Countries;
1950-1984, in millions

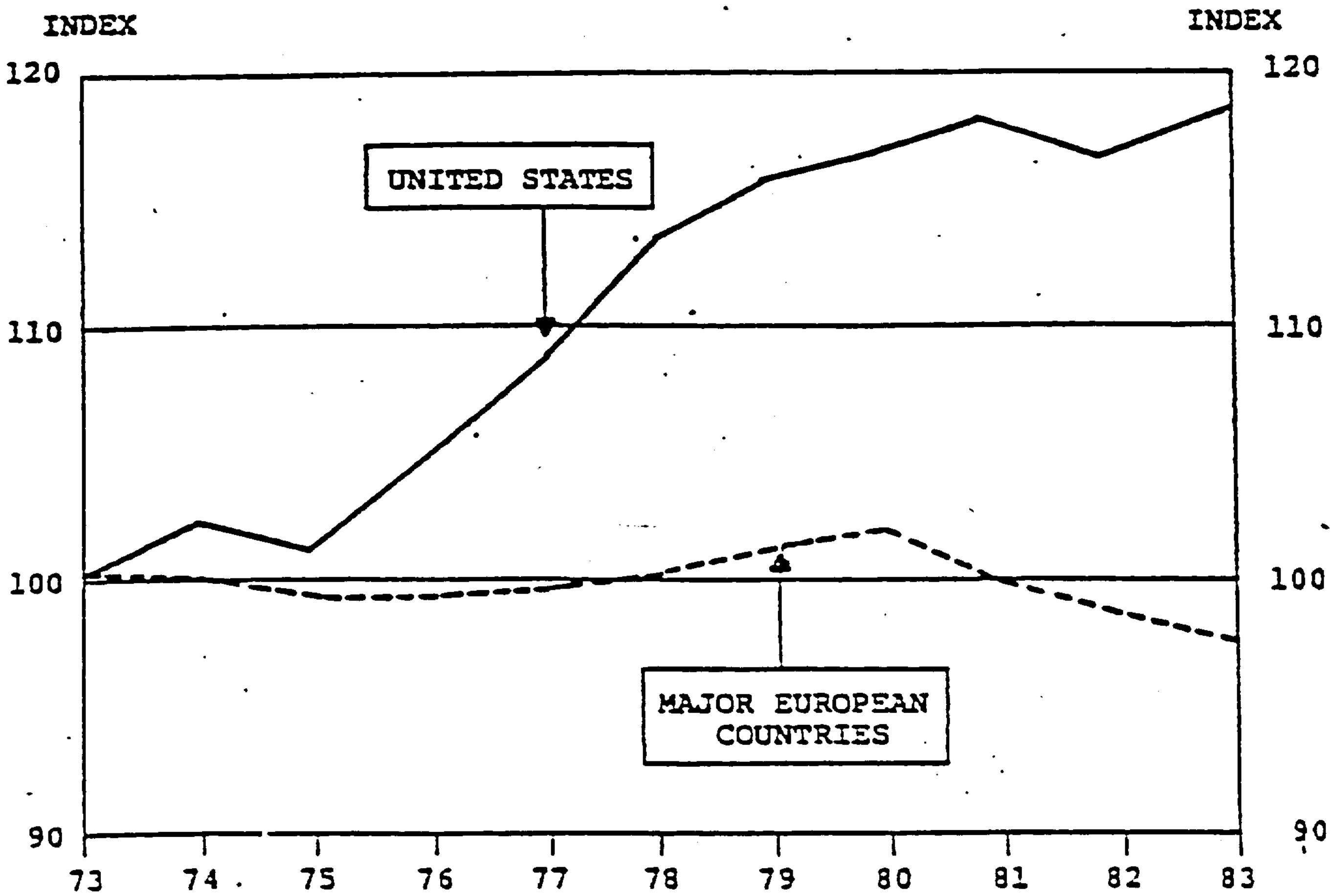
	U.S.	Canada	Japan	Belgium	France	FRG	Italy	Netherlands	U.K.	Europe 1/
1950	60.57	5.01	35.11	3.41	19.48	20.94	20.40	3.73	22.64	90.60
1973	87.39	8.84	52.15	3.84	21.30	26.86	19.31	4.67	24.97	100.95
1984	107.22	11.08	57.12	3.67	21.19	25.06	20.75	4.99	23.80	99.46
1950-84:										
Change in total number employed	46.65	6.07	22.01	0.26	1.71	4.12	0.35	1.26	1.16	8.86
Percentage Change	77.2	121.2	67.7	7.6	8.8	19.7	1.7	33.8	5.1	9.8
1973-84:										
Change in total number employed	19.83	2.24	4.97	-0.17	-0.11	-1.80	1.44	0.32	-1.17	-1.49
Percentage Change	22.7	25.3	9.5	-4.4	-0.5	-6.7	7.5	6.9	-4.7	-1.5

Source: U.S. Department of Labor, Bureau of Labor Statistics

1/ Total for Belgium, France, FRG, Italy, Netherlands, and the U.K.

Or, graphically it could be expressed as follows:

Employment in the U.S. and Europe
1973 = 100



SOURCE: Andrew J. Pierre, ed., Unemployment and Growth in the Western Economies, Council on Foreign Relations, p. 25.

Dr. Bloomfield described the U.S. as a remarkable job machine. This economy has shown an immense capacity to create jobs across the board, even during every month of the recession he stated, quoting the Brookings Institution. Most of the job creation in the U.S. has come from services, where roughly two - thirds of todays U.S. workers - or about 67 million - make their living. The service sector continues to grow at a remarkable speed and the more permanent nature of the long-run shift in this direction is now becoming clear. According to the U.S. Bureau of Statistics, nearly 75% of all new jobs will come from service producing industries through 1995. Within the services, the sector called "miscellaneous", which is a catch - all category of medical care, business services, recreation and hotels, will provide one in three new jobs in the coming decade. The category itself will, by 1995, account for one quarter of total employment, or some 31 million jobs.

In the category of business services, i.e. consultants, personnel services, public relations, security systems, computer and data processing services, employment is expected to double and will reach some 6.2 million by 1995. "Miscellaneous professional services", which includes lawyers, engineers, accountants and architects could add som 850,000 jobs and reach 3 million or more, or 12% of all new jobs generated by the end of the next decade.

Whereas there is a generally accepted gloomy outlook for "smokestack industries", Dr. Bloomfield felt that there are some bright spots here as well. Some 2.3 million manufacturing jobs has been lost in the most recent recession, but another 1.5 million jobs has been generated. Today 25 million Americans are employed in mining, manufacturing and construction, i.e. the goods-producing sector. The decline from 25% of all jobs (1959) to 19% today, is expected to hold steady. One of every six new jobs will be in the manufacturing sector, most them in new, high-technology fields.

Job creation and employment in the U.S. have far exceeded that of most of her competitors, Dr. Bloomfield said. Unemployment, however, has remained on a level roughly equivalent to that of Europe (see table).

Table 2: Unemployment Rates in Selected OECD Countries, Various Years

	1970s Average	Actual 1982	Actual 1983	Actual 1984	1982-84 Average	Forecast 1985	Forecast 1986
U.S.	6.1	9.7	9.6	7.5	8.9	6.8	6.2
Canada	6.2	11.1	11.9	11.5	11.5	11.5	11.5
Japan	1.7	2.4	2.6	2.8	2.6	2.5	2.5
France	3.7	8.0	8.2	9.3	8.5	10.5	11.0
FRG	2.3	6.7	8.2	8.4	7.8	8.4	8.4
Italy	6.3	9.1	9.7	10.0	9.6	10.5	10.8
U.K.	4.7	11.0	11.5	11.8	11.4	11.8	11.8
Smaller European Countries	NA	10.7	12.2	12.8	11.9	13.3	NA

Source: Graciela Testa-Ortiz, "Europessimism: Factors Underlying Western Europe's Economic Decline", Economic Outlook, March 1985, U.S. Chamber of Commerce and Organization for Economic Cooperation and Development.

Now, in one important area the U.S. record falls far short of that of her competitors, and that is the area of productivity. Gains in worker productivity in manufacturing, Dr. Bloomfield charged, have consistently lagged behind those elsewhere. Within a period of 10 years, the U.S. productivity advances averaged only 1.9% per annum compared with gains of 7.3% for Japan, 4.6% for France, 3.3% for FRG, 3.7% for Italy and 1.9% for the U.K. Recent calculations, however, show that U.S. manufacturing productivity, measured by the average annual change in unit labor costs, has improved dramatically compared to most of Western Europe. Whereas unit labor costs fell by 0.8% in the U.S. in 1983, it rose by some 0.7% in the U.K. by 6.6% in France, and by 15.9% in Italy. The evolution of this trend is illustrated in a table, showing unit labor costs in manufacturing on a national currency basis for some 12 countries within a 13 year period.

Table 3: Unit Labor Costs in Manufacturing: National Currency Basis 1/ 12 Countries, 1960-83

Average Annual Rates of Change 2/

COUNTRY	1960-83	1960-73	1973-83	1973-80	1981	1982	1983
U.S.	4.4	1.9	7.2	7.6	6.1	6.6	-0.8
Canada	5.5	1.8	9.8	9.5	13.7	13.5	.3
Japan	4.6	3.5	1.2	3.0	1.8	-2.8	-2.0
Belgium	4.9	3.4	4.9	6.1	5.1	.8	2.5
France	6.6	2.6	10.4	10.2	12.9	11.7	6.6
FRG	4.6	3.7	4.5	4.7	5.2	4.1	-1.0
Italy	10.5	5.1	15.4	15.9	18.9	16.5	15.9
Netherlands	5.2	4.8	3.8	4.8	1.8	4.4	-.4
U.K.	9.7	4.1	14.7	17.8	7.6	4.6	.7

1/ Computed in terms of each country's own currency.

2/ Rates of change computed from the least squares trend of the logarithms of the index numbers.

NOTE: Data relate to all employed persons in the United States and Canada; all employees in the other countries.

SOURCE: U.S. Department of Labor, Bureau of Labor Statistics.

Dr. Bloomfield stated that the U.S. productivity increases could have been even better, had the U.S. generated fewer jobs within the time period in question. He did admit, however, that this would not constitute an appropriate economic goal.

Service jobs amount to some 69% of U.S. employment, they bulk larger in the U.S. than abroad. Productivity gains, as a general rule, are harder to obtain than elsewhere in the economy, he said. Furthermore, the hourly output of U.S. workers has long exceeded - in absolute terms - that of workers elsewhere. Consequently, a small productivity gain in the U.S. would match, or even exceed in absolute terms, a far larger percentage increase in some other country.

As for economic growth, the U.S. has performed well since the 1981-82 recession. The U.S. real GNP growth since 1982 has left Europe's economics "in the dust" and even outstripped that of Japan for two years running, which is a relatively new phenomenon.

Table 4: Real Gross Domestic Product, 1982-1986
(percent change)

	Average Annual Change	Actual		Forecast		
	1970-81	1982	1983	1984	1985	1986
U.S.	3.4	-2.1	3.1	6.8	4.6	5.1
Canada	5.1	-4.4	3.3	4.8	2.5	2.9
Japan	6.1	3.3	3.0	5.8	4.6	3.6
France	3.9	2.0	0.7	1.8	2.0	2.0
FRG	2.9	-1.1	1.3	2.5	2.7	2.8
Italy	3.3	-0.4	-1.2	2.9	2.7	2.0
U.K.	1.6	2.5	3.2	2.0	2.9	2.8
Smaller European Countries	-	0.8	1.6	2.5	2.5	NA

Source: Graciela Testa-Ortiz, "Europessimism: Factors Underlying Western Europe's Economic Decline", Economic Outlook, March 1985, U.S. Chamber of Commerce and Organization for Economic Cooperation and Development.

As for government's share of Gross Domestic Product, it tends to be much smaller in the U.S. than in most European countries. Whereas total U.S. government (i.e. federal, state and local) outlays rose from 30.3% in 1970 to 34% in 1981, the contrast with Europe is marked. During the same period, the same figures for the U.K. where 30.3% and 44.4% and for FRG they were 32.6 and 44.3%. Dr. Bloomfield concluded that Europe's government expenditures in % of GDP is 30% higher than in the U.S. Since higher levels of government outlays require higher overall tax burden, this further reduces the incentives to work, save and invest.

Dr. Bloomfield then turned to the "spirit of entrepreneurship" when explaining the results of cultural differences between the U.S. and Europe (stated but not clearly understood). He felt that this phenomenon was significant in explaining some of the many differences in the role of job creation and technological advance. As Ralf Dahrendorff[2] had said "Britain is a society of many solidarities, totally adverse to the spirit of competition between individuals. If you try to set one against the other, you get nowhere in Britain. America is exactly the opposite. There is a great tradition to get somewhere on your own. In Britain you always pretend you are not trying".

Quoting the British Prime Minister Margaret Thatcher, Dr. Bloomfield said that the British reputation for research is extremely high, whereas the process of turning these into industrial profit is not at all well developed. The U.S., on the other hand is totally different, having free enterprise, built into her constitution. She is the last safe haven, everyone's safe haven for their money. She will never have a socialist government which will nationalize everything and propose high taxes, instead, she is the land of free enterprise, of freedom, and the country of last resort.

Turning to yet another observer of the British scene, Dr. Bloomfield felt that whereas change is what makes the U.S. so exciting, in Britain this by itself is regarded as suspect. People tend to become protective of their slot and fight so that technology does not change. In Britain people will tend to stick with a firm or a profession so that a middle class person graduating from university at, say age 22 does what he or she in going to do for the remainder of his or her whole career. The lack of risk taking, personal as well as professional is very damaging for the country as well as very pervasive.[3]

Whereas in the U.K. there has always been a certain disdain among the professional elite for industry and commerce, the same does not hold for the U.S. The mood of American business, as Dr. Bloomsfield saw it, shifts from a love of bigness to enthusiasm for independent action. The distinction between being part of a big company or being an entrepreneur is less sharp now than what it was. At the same time as individuals set out to build their own businesses, large companies are coming under increasing pressure to innovate. Hence, they depend on leadership in many respects. The proper way of thinking of an entrepreneur is as someone who can put existing resources to more productive uses, be they inside an already existing company or the setting up of new ones.

Dr. Bloomfield felt that the "Silicon Valley Garage" was a misleading symbol of what American entrepreneurship has been all about in the past half decade or so. Much of the contribution made by recent entrepreneurs has been by such long-standing industries as transport, finance and retailing; whereas electronics and biotechnology, for example, are only part of the story. Even in those newer industries, Dr. Bloomfield stated, the "garage people" are a small minority. Entrepreneurs are also at work inside the largest companies. Citicorp, for example, being the biggest bank in the U.S. was quicker than its competitors to switch resources from international to retail banking. Sears-Roebuck, in spite of its large size, became the first retailer to attempt the complete integration of the selling of goods and providing of financial services. In a sense, these giant companies are as much part of the entrepreneurial spirit in the U.S. as is Apple and her two founders.

As more is learned about how to manage innovation inside established companies, the previous contrast between the self-made man and the organization man is breaking down. Simultaneously, individual entrepreneurs are becoming better managers. Dr. Bloomfield mentioned Control Data as an example of a big computer and information firm with a well-earned reputation for helping entrepreneurs. The company spun off its computer manufacturing - the core of the company - into a separate unit in early 1984. Control Data gave some of her principal scientists a stake in the new firm. Unless this was done, the company feared, it would lose some of its top people and fall behind its competitors. Dr. Bloomstein stated that a business run by 'empire builders' could not have contemplated such decolonization.

As Peter Drucker, among others, has observed, the U.S.'s sudden outburst of entrepreneurial activity may in part be related to a mixture of frustration and opportunity, which in this instance may have turned out to be beneficial. The number of business school graduates more than doubled during the 1970s while more young people entered the labour force. Whereas those aged between 18 and 24 accounted for some 9% of the U.S. workforce in 1960, the same group constituted 12% by 1970 and more than 13% by 1980. However, total employment in the Fortune 500 fell from some 15.5 million in 1973 to 14 million in 1983, which means that there were more young people in business trying to get to the top while fewer jobs opened up. This, according to Mr. Drucker, would encourage many to train in a big firm before looking for a chance to strike out individually.

Both upheaval in many markets and rapid technological change have given people new opportunities. Also, deregulation of air and road transport as well as long-distance telecommunications during the past six or so years have proved to be a boon for many entrepreneurs. It has also helped that being entrepreneurial by now has become chic, with universities and business schools offering literally hundreds of courses on how to succeed in these endeavours.

Is there a role for government in fostering entrepreneurship? Obviously yes, as two government policy shifts in the U.S. have shown in terms of adding to the entrepreneurial explosion. They are: 1) tax policy revisions and 2) deregulation. By 1978, for example, the U.S. Congress, as a result of pressures, cut the maximum rate of capital gains tax from 50 to 20%. Hence, more risk capital was put in the hands of individuals trying to set up their own enterprise most often in the fields of electronics. Rapid technological change as well as competition within the U.S. for products and services from all over the globe, will continue to make markets unpredictable. This will favour entrepreneurship in a wide variety of firms, large companies, smaller enterprises, among salaried managers and so on. Also, deregulation has played an important role for the benefit of the development of entrepreneurship in the U.S. This process, which started under President Carter initially targetted the areas of transportation, telecommunications and financial services.

Since these industries are critical elements of the economy's infrastructure, their deregulation is bound to make the U.S. economy increasingly efficient and innovative.

Turning to the question of flexibility and mobility of labour, the speaker felt that the structure and flexibility of the U.S. national labour markets may be one reason why the U.S. economy appears more dynamic and actively job-creating than Europe's. European workers in declining industries have been far more resistant than their U.S. counterparts to proposals for retraining for jobs in faster growing, service-oriented sectors. In Europe workers have in many cases virtually guaranteed lifetime incomes, with their employers picking up the payroll taxes often amounting to as much as 70% of wages (compared to some 28% in the U.S.). They have, partly for these reasons, been extremely hesitant to create new jobs, preferring instead to invest in labour saving devices and machinery. Also, the level and structure of wages have been too rigid to allow a proper adjustment to new economic conditions created by the two recent oil-shocks. In theory, then, if the cost of employing people went down, the unemployed might eventually push themselves back into jobs.

However, this is unlikely to happen. The European trade unions are still, generally considered, looked at as social partners, rather than adversaries of government or business. European leaders are loath to try to remove or seriously change the underlying bedrock of protective legislation. Hence, the speaker claimed, creating economic flexibility on the U.S. scale in Europe would require a social revolution. Whereas union wage bargaining covers only 25% of U.S. workers, it effects some 90% in FRG and only slightly less than that in other EEC countries. In many European countries, companies in trouble cannot fire labour without government permission. Unemployment benefits are quite generous throughout Europe. In the Netherlands, for example, the unemployed receive between 75-99% of their most recent salaries, whereas in FRG they get some 65% of previous pay in the first year and 60% the second. Wholesale firings could mean just transferring workers from corporate to state payrolls, which, as the speaker saw it, through high taxes is funded by the corporations anyway.

Paradoxically this means that European economies have increased output and unemployment simultaneously. Productivity, in terms of output per worker has risen, though jobs have languished. Being employed in Europe, then, has been a "good deal". Whereas between 1970 and 1980 German manufacturing earnings rose some 46% after inflation, in the U.S. the gain was only 13%.

However, the effect on European jobs has been devastating. Since 1970, the U.S. labour force has grown 37%, which reflects on influx of "baby boom" workers. Some 85% of the new workers have found jobs. In FRG, however, the number of would-be workers has grown a more 4.2% since 1970, whereas jobs have actually dropped 3.8%. Hence, much of the resulting unemployment has been long-term. Two-fifths of all French jobless people have been out of work for more than a year, whereas the comparable proportion in the U.S. amounts to less than 10%. Hence, to a considerable extent, European economies have been run for the benefit of the employed at the expense of the new workers.

As Dr. Bloomfield is aware, similar pressures do of course also exist in the U.S. Quite naturally, workers do not wish to see their real (after-inflation) salaries suffer, even in recession. Should wages be held down too much, many firms know that they risk losing some of their best workers during a recovery. Hence wage increases are often quite crudely pegged to past inflation. As is known, it is this price-wage spirit which makes inflation, once started, extremely difficult to stop. However, at the same time, the U.S. labour markets impose checks on large costs increases that Europe's do not.

As is, or should also be known, workers bargaining strength in the U.S. is less than that of Europe. Some 25% of the former's work force (including teachers) is unionized, as opposed to 42% in FRG and 57% in the U.K. It is also important to note, as the speaker pointed out, that Americans change their jobs more often than do the Europeans. Whereas the European worker stays with his or her employer an average 17 years, the comparable figure for an American worker is 14 years.[4]

Dr. Bloomfield proceeded to outline some flexibility case studies, showing how the U.S. labor force has demonstrated increased flexibility with respect to salaries, job content, and migration. High, non-competitive labor costs in the U.S. are being cut, due in part to deregulation of key industries and intense worldwide as well as domestic competition. In return for wage cuts, workers often receive a profit-sharing plan. Whereas Eastern Airlines has been without an annual profit since 1979, it has told lenders that with continued wage-cuts, it could register a profit of $97 million this year. This has not only saved Eastern Airlines from bankruptcy but it has also turned business around. Similar cases could be made for other U.S. companies.

Another important element which contributes towards relative flexibility and mobility of U.S. management may be found in the country's training for business careers. With over 201.000 students having received B.A. degrees in Business Management, 58.000 a Master's degree, and almost 1000 a Ph.D in one year alone (1981), the study of how to utilize people and capital efficiently is taken seriously by a large number of individuals.

Turning to technology as well as research and development relative to GNP some interesting facts are revealed. Following a fairly steady decline since the late 1960s, R&D spending as a percentage of GNP in the U.S. began clumbing in 1979. It now stands at some 2.7% of GNP, possibly the highest in the industrialized world.

Table 5: National Expenditures for Performance of R&D as a Percent of Gross National Product (GNP) by Country: 1961-85

Year	France	FRG	Japan	United Kingdom	United States	U.S.S.R.
1961	1.38	NA	1.39	2.45	2.73	NA
1962	1.46	1.25	1.47	NA	2.72	2.64
1963	1.55	1.41	1.44	NA	2.86	2.80
1964	1.81	1.57	1.48	2.29	2.96	2.87
1965	2.01	1.73	1.52	NA	2.90	2.85
1966	2.06	1.81	1.46	2.31	2.89	2.88
1967	2.13	1.97	1.52	2.29	2.89	2.91
1968	2.08	1.97	1.60	2.25	2.82	NA
1969	1.94	1.82	1.64	2.27	2.72	3.03
1970	1.91	2.06	1.85	NA	2.63	3.28
1971	1.90	2.20	1.85	NA	2.48	3.46
1972	1.86	2.21	1.86	2.11	2.40	3.71
1973	1.76	2.09	1.90	NA	2.32	3.81
1974	1.79	2.13	1.97	NA	2.29	3.74
1975	1.80	2.23	1.96	2.19	2.27	3.78
1976	1.76	2.15	1.93	NA	2.23	3.54
1977	1.76	2.15	1.93	NA	2.23	3.54
1978	1.76	2.24	2.00	2.24	2.22	3.54
1979	1.81	2.40	2.09	NA	2.27	3.59
1980	1.85	2.42	2.22	NA	2.38	3.76
1981	2.01	2.49	2.38	2.47	2.43	3.75
1982	2.11	2.58	2.47	NA	2.58	3.68
1983 (est)	2.16	2.57	2.58	NA	2.62	NA
1984 (est)	2.19	NA	NA	NA	2.63	NA
1985 (est)	NA	NA	NA	NA	2.71	NA

SOURCE: National Science Foundation, Organisation for Economic Co-operation and national country sources.

Admittedly, part of the increase is a reflection of the Reagan Administration's military build-up. However, business investment in R & D has also been growing at more than 6% per annum, in inflation-adjusted dollars since 1975, as compared to 2% from 1970 to 1975. FRG and Japan still spend more on civilian R&D as a percentage of GNP.[5] However, as the speaker pointed out, playing the percentage game may tend to obscure the magnitude of the U.S. advantage, as the latter obviously gets considerable economics of sale. For example, the investment by the U.S. in R&D for 1985 ($109 billion) is more than the combined investment of FRG, Japan and France.

Also, U.S. business are investing more in improving manufacturing technology as well as in product research. Yet Japan and FRG still lead in this area. The U.S. is trying to catch up. For example, domestic sales of the fledgling U.S. robotics industry jumped from $40 million in 1980 to about $400 million in 1984 and are expected to grow at some 30% a year.[6]

The speaker proceeded to discuss what he termed "targeting the process of innovation". Drawing on a Silicon Valley based proposal, he suggested that the following recommendations could be useful in a general sense, at least for the U.S.

1. Basic Research Recommendations:

- Increase emphasis on civilian basic research as recommended in the President's budget;

- Offer a 25 percent tax credit for corporate funding of research in colleges and universities; and

- Modify antitrust laws to require that research and development joint ventures be judged by their competitive effects only and reduce the potential liability for damages from treble to actual damages.

2. <u>Incentives for Risk Taking</u>:

- Make permanent the R&D tax credit and make it applicable to software and start-up companies;

- Modify antitrust and intellectual property laws to require that the courts consider the effects of competition when judging alleged patent misuse by a patent holder and alleged antitrust violations in the licensing of intellectual property;

- Permit enforcement of a domestic proccess patent against a product made without proper authority in a foreign country by the patented process; and

- Extend intellectual property law to include semiconductor designs and masks.

3. <u>Providing Trained Personnel</u>:

- Offer tax credits and enhanced deductions to corporations contributing state-of-the-art scientific equipment and related support services to colleges and universities for educational purposes; and

- Permit foreign nationals who possess critical skills which are in short supply in the U.S. to remain and work here.

4. Expanding Market Opportunities:

- Instruct our trade negotiators to seek elimination of trade barriers and extension of the GATT to cover investments and services;

- Focus and streamline export controls so they are more effective in preventing the trade-related transfer of militarily critical technologies to our adversaries while avoiding unnecessary obstacles to exports;

- Take actions to reduce substantially the projected budget deficits for FY 1986 and beyond.[7]

These recommendations are an example of the type of politics being given serious consideration in the U.S. today.

Final tax incentives are also necessary to boost economic growth and the furtherance of entrepreneurship. To this effect the business investment tax provisions of the Economic Recovery Tax Act of 1981, the Accelerated Cost Recovery System (ACRS) and the liberalization of the Investment Tax Credit (ITC) have improved the business investment climate substantially.

Dr. Bloomfield stated that the boom in business investment, which begun in November 1982 as the economy climbed out of the steepest recession since the 1930s, has been much stronger than in any previous recovery. According to the FY 1986 Budget of the United States:

> "The increase in capital spending in the present expansion is far stronger than normal. Over the past two years, real gross nonresidential fixed investment

increased at a 15.4 percent annual rate, compared with an average increase of less than 7 percent in previous cycles between 1950 and 1980."

The enactment of a modern investment tax structure (ACRS/ITC) has helped diffuse new technology as well as increase capital per worker. According to a recent U.S. Commerce Department Report, the ACRS/ITC capital cost recovery provisions have stimulated major investments in automation, which in turn have resulted in a increased rate of business productivity, reversing a nearly 20 years old trend of downward productivity increases. Average annual increase in the non-farm business sector in the U.S. for 1983-84 was 3.3%, which compares favourably with average annual increases of only 1.3% for 1966-82, and 2.68% for 1948-64.

Due to the installation of flexible automated systems, robotics and computer controls, productivity increases of 100-1000% are not uncommon in certain manufacturing operations. Within a decade, many manufacturing operations will in fact not be viable in world markets unless they have installed flexible manufacturing systems (FMS).

The speaker saw increased productivity as a critical multiplier factor in the economy directly affecting budget and trade deficits, as well as inflation and interest rates. He also saw the need for venture capital to benefit from reduced capital gains tax, stressing that the recent cuts in the maximum capital gains tax of almost 50% to 20% today have been among the most successful tax reform efforts in U.S. history. The speaker did not think much of the counter argument by skeptics who felt that reducing capital gains taxes would do little for economic growth, but instead significantly erode government revenues. They have been wrong on both counts. The period 1969-1977 has been one of high capital gains tax and hence poor investment climate. From 1978 up to now, lower capital gains taxes have led to an improved investment climate. The surge in venture capital, bolstered corporate equity values and great job creation are all due to the government having restored the reward for risk-taking and investment.

A government prediction in 1978 that if proposed capital gains tax became law there would be a subsequent annual $2 billion raid on the U.S. Treasury turned out to be completely wrong. In fact, the contrary occurred. In 1979 U.S. Treasury capital gains increased by more than $2 billion, and revenues rose again in 1980. Recent data from the U.S. Treasury confirms that capital gains tax records are holding up, despite reduction in the maximum tax rate on capital gains in 1981.

As a general rule, the raising and lowering of capital gains taxes in the U.S. over the past two decades corresponds to a decrease and increase in new investments. The relatively low capital gains tax of the 1950s and 1960s encouraged investment in new firms and productivity increases. The 1969 capital gains tax increases to 'neutralize' perceived inequalities resulted in investment in innovative new firms virtually stopping. This also led to the beginning of foreign takeovers of markets once dominated by the U.S. Foreign competitors were even able to capture many U.S. markets.

By 1978 the maximum capital gains taxes were again decreased, with remarkable results. In the period 1972-1978, investment available to venture capital funds investing in small companies averaged $50 million per year. Some 18 months later, $1 billion in new capital had become available to such funds.

Completing his remarkably clear and logical keynote address, Dr. Bloomfield sketched briefly what he saw as the future of the U.S. experience. Federal budget deficits, the strong dollar and the impact of new tax proposals are the most critical factors in this respect. He saw the political inability to control federal spending as the darkest cloud over the U.S. economic future. It is critically important that U.S. creditors remain confident of the government's ability to control, i.e. reduce deficit spending. Quoting Herbert Stein, former Chairman of the President's Council of Economic Advisers, the speaker cautioned that present practice and rhetoric about deficits are undermining all respect for budgetary rules that would give weight to the income levels and tax burdens of future generations.

The second main problem area remains the very strong U.S. dollar which threatens U.S. exports and makes import cheap. According to Data Resources Inc., the strong dollar has cost the U.S. economy some 2 million jobs since 1980, of which 1.5 million are in manufacturing. Also, the sharp rise in the value of the dollar over the 1981-83 period has had a dramatic effect on foreign unit labor costs. Changes in foreign unit labor costs, as expressed in U.S. dollars over the period 1981-83 have been dramatic. For example, exchange rate adjusted unit labour costs in Japan fell by 7%, in the U.K. by 28.7%, and in Sweden by 41.5%. Although U.S. productivity showed an <u>increase</u> through this period, the increasing strength of the dollar severely reduced the U.S. capacity to compete, both at home and abroad. The high technology sector of U.S. industry, which had a $27 billion trade surplus in 1980 has gone down to some $5 billion in 1984. This trend, should it continue unchecked could lead to a shut down of certain U.S. facilities as well as the loss of many jobs.

The third dark cloud on the U.S. horizon, as he saw it, is the attack on the major investment incentives in the U.S. tax code. The forthcoming proposals to eliminate or curtail the Investment Tax Credit (ITC), the accelerated Cost Recovery System (ACRS) and lower taxes on capital gains were, in the view of the speaker, retrogressive and possibly dangerous steps to take. U.S. industry has to be modernized to compete effectively in tough international markets, and every appropriate means to protect and enhance investments must be utilized fully. The timing would be wrong for these legislative actions to be undertaken now.

The keynote speaker ended his presentation by stating that, in his opinion the uniquely American spirit of enterprise, supported by the cultural, economic and government policy outlined were plausible explanations for the U.S. economic progress.

Plenary Sessions

The debate that followed the keynote address and persisted throughout the remainder of the conference, was very lively. The keynote speaker had really set the stage with a challenging, from a European point of view, almost confrontational presentation. He had successfully managed to explore and highlight every area in the interface of technology, job creation and unemployment where there were differences between the U.S. and the European experience, as well as to explain what the real differences were and why they existed. In the process he had also managed to step on many toes, by challenging not only the sacred cows of European welfare statism but also some of the more profound underlying assumptions of their social and political existence. It is debatable if the main keynote speaker at this conference went too far in this respect, but he certainly managed to stir things up.

Much of what followed were in fact pros and cons of the main debate: should Europe try to be more like the U.S. in order to solve her problems? The answer is probably a qualified 'yes'; however much would seem to depend upon how the issues are introduced into the political arena. The rules of the game, i.e. the very sensible decision that all Wilton Park debates will be kept on the non-attributable level prevents us from identifying individual participants, their interventions and specific points of view. Instead, this report concentrates on the keynote address and other plenary presentations where formal positions were put forward. In some cases even some of the plenary presenters spoke 'off the cuff', hence their comments deserve protection as proprietary information.

Dr. Dieter von Sanden, a German scientist and businessman falls into this category. He is a physicist and mathematician whose career with Siemens has been longer than 30 years, with a detailed knowledge of this large, important German firm, which he knows intimately from the point of view of communications engineering, development and planning. Dr. von Sanden has been Head of the Telecommunications (now Communications) Group since 1973, and has been a member of the Managing Board of Siemens since 1970.

Siemens has more than 50% of its business abroad. Efficiency, and good labour relations are therefore extremely important for this firm. Von Sanden, who admitted having been very impressed and finding himself largely in agreement with the keynote speaker, gave some detailed examples from his own country and firm. He also spoke eloquently on the need to change the internal culture of business and industry and discussed in some detail the notion of "educated incapacity".[8] In the Federal Republic of Germany the employers pay 80% of benefits in addition to their employees salaries. Obviously the keynote address had found a chord.

Dr. von Sanden also gave useful points of view about the relationship between small and large companies, which ought as far as possible to be symbiotic. Practically all technology transfer comes about through the private sector. He discussed pros and cons regarding 'Germany as a cartell", the details of which will not be accounted for in this report. Suffice to say that his "European Businessman's View" was an important and interesting contribution to the debate.

Ian Miles, who as Senior Fellow of the Science Policy Research Unit (SPRU) at the University of Sussex is well known and prolific writer,[9] spoke on the "Psychological Significance of Work". He is a trained social psychologist who has been with SPRU since 1972. The author of numerous papers and reports, Ian Miles is currently researching "The Future of Work" with support from the Joseph Rowntree Memorial Trust. If Mark Bloomfield had described the interaction of technology, efficiency and job creation in somewhat mechanical terms, Ian Mills gave a different perspective from the point of view of work as identity. A very careful and detailed study based upon empirical research carried out locally in and around Brighton (where SPRU is located), compared with early Austrian studies of the impact of unemployment (the Marienthal studies) revealed much of interest with regard to attitudes to work and the psychological significancy of "normal" employment. When queried by several of the delegates (this author included) about some of his findings in the light of recent social change, Mr. Miles admitted that, perhaps, the boundaries were being blurred somewhat now between 'work' and 'non-work' and that this was far from bad. For one thing, if done correctly, it can lead to greater self-reliance and independence.[10] (With the permission of Ian Miles and Wilton Park an audiotape covering the formal part of his presentation is in the possession of the present author).

On Tuesday, late afternoon, the first small discussion groups were instituted, lasting for 1 1/2 hrs. with members spread out at different locations in the House. There were four themes, namely:

- Technology, Job Creation and European Co-operation
- The entrepreneurial culture: A U.S.-European Contrast?
- What criteria should politicians use for the success of economic policy?, and
- Technology and employment: Is understanding their relationship a matter of fact or faith?

This format, regularly used at Wilton Park conferences enables the delegates to better get to know each other, as well as to explore aspects of the larger debate in greater details. From what was experienced by the present writer, as well as conveyed through discussion with other delegates, the small discussion groups sessions had all gone well. Roughly even in size, and not by design as there was self-selection, the issues for discussion had all been duly covered, it was felt.

The program, having by now been revised somewhat, saw a presentation by Mr. Ivor Richard, Q.C., MBE on "Technology, Job Creation and Unemployment: What Policies for the EEC?" He was EEC Commissioner for Employment and Social Affairs 1981-1984, is a barrister with a practice in London and consultancy work for a firm of attorneys in New York, where he was also former Permanent Representative of the United Kingdom to the United Nations. Mr. Richard is a well-known former Labour Member of Parliament, and a member of the Fabian Society. While at the U.N. he had been the Chairman for 1976 of the Geneva Conference on Rhodesia.

Mr. Richard came well prepared to this session, having no doubt been clued in on the big debate which was going on due to the remarkable keynote opening address. His presentation was low-keyed, very reasoned and it concentrated on an explanation of what could (and could not) realistically be done in this field, as he saw it. His main points were that: 1) the tradition of governmental intervention is much stronger in Europe than in the U.S.; 2) Europe has now her economics on employment rates much lower than the U.S., since full employment is the plank of all political parties. Some developments which could affect this is the decline in birth rates, and subsequent skewing of population figures, and more women in the labor market; 3) some profound changes and restructuring of basic industries have taken place; 4) the impact of technology. The Rand Corporation has reported that 3% of U.S. labor force will do <u>all</u> the work by the year 2000. The Hudson Institute suggests that it will be done by 4%. In either case, Mr. Richard asked: "What will happen to people?". Training is one solution, and he admitted that most European training schemes are ineffective. Perhaps the question "What is work?" should be looked at in some greater detail. There were points of similarity between his and Ian Miles' presentations and ways of thinking.

Mr. Richard spoke of the EEC as having essentially a "fig-leaf" function, to involve, inform and adjust. "Small is beautiful, do as the Italians", be stated referring to some previously somewhat derogatory references having been made by another speaker about Italy's performance according to certain economic and social indicators. What is needed, he concluded, is 'a policy of productive public investment'. This, however was not defined more precisely.

The next item on the revised programme was a presentation by Graham Sharman, Director of McKinsey and Company, Amsterdam, who spoke on "The entrepreneurial Dynamic - a U.S-European Comparison". Mr. Sharman, who has been with McKinsey and Company since 1971 is a mechanical as well as chemical engineer. He also holds an MBA from Harvard University. His background seems to have been in business strategy and operations effectiveness improvement, including the area of integrated logistics. Mr. Sharman also appears to be a fairly prolific writer.[11]

He spoke on entrepreneurship in the "growers", why it was needed, what is different this time around, and how it should be supported. One reason is unemployment. On a comparative basis, the picture looks as follows:

Table 6: Comparative Unemployment Figures
1973, 1979 and 1983

UNEMPLOYMENT	1973	1979	1983
USA	5%	6%	10%
Japan	1	2	3
FRG	1	3	9
France	3	6	8
U.K.	3	6	12
Netherlands	6	8	18
Belgium	5	7	15

Comparing two cases, the U.S. and the Netherlands, Mr. Sharman stated that the "yearly deathrate" is as follows:

	Firms	Employment
U.S.	8-10%	8-10%
The Netherlands	1-2%	1-2%

The long term challenge lies in the fact that two out of every three jobs have been eliminated every 50 year since 1980, whereas total employment has increased by a factor of 10 since that time. He proceeded to compare the two cases in terms of productivity drivers in the pre-and past industrial age (1600 vs. 1800/1900) and plotted how the percentage of labor force has changed over time. The new job creators in the U.S. are in High Technology, "revitalizing" in previously declining industries and in "thoughtware", i.e. in new services applying new technology. 12-14% of Small to Medium Enterprises (SME) - "the growers" - create all SME jobs. What is different? There is a distinct strategy, a more focussed organization as well as committed leadership. The true entrepreneur is not a get-rich-quick artist, but the practitioner of the only management style capable of creating economic value and sustainable employment growth. What it takes is perseverance to the point of obsession, "builders" rather than "bankers", and calculated risk takers. The speaker then proceeded to identify the winners in any industry. Respect for proprietary information, forthcoming publishing rights as well as Wilton Park rules of non-contributionality prevents a more detailed explanation of the many interesting points made by this particular speaker. Suffice to say that it very much substantiated and implemented claims made in the keynote address, as well as points elaborated upon by Dr. von Sanden in his presentation.

Wednesday afternoon constituted an extramural session with a visit to the London Docklands Development Corporation. The delegates were able to tour the former docks area of East

London, which enabled them to see the changes which had taken place, due to both public and private efforts. The area has become a modern infrastructure of various utilities, telecommunications as well as transportation. Talks were given on the London Docklands Development area's experiences concerning the use of technology, job creation and unemployment. The visit took place by permission of the Chairman and Board of the Corporation, and was organized through the co-operation of the L.D.D.C.'s Business Development Manager, Mr. Derek Hemingway.

The following day, Mr. Ronald E. Kutscher, Associate Commissioner, Office of Economic Growth and Employment, U.S. Bureau of Labor Statistics addressed the group with a presentation on the "Future of Work". This was a lively, forthright and very interesting presentation full of worthwhile facts and insights. "He who lives by the crystal ball gets to eat broken glass", Mr. Kutscher started off in gentle self-mockery. From then on he proceeded to show, very authoritatively and in considerable detail how good forecasting can be done and how one subsequently can say something sensible about the likely future of work in general and the workforce in particular. A former member of three U.S. delegations to OECD, to ILO and to the National Academy of Sciences in late 1983, Mr. Kutscher spoke from a broad and substantial knowledge base. The following main conclusion arose from his presentation:

1) The U.S. population will grow more slowly through the mid-1990. Average annual increase will drop below 1% for 1985-90 and even lower for 1990-95.

2) Changes in population will vary among the states. Projected percent change in state population, 1980-2000 vary from a decline in the

North-East U.S. (New York, Pennsylvania, Massachusetts, Maine etc.) as well as in South Dakota, followed by an increase of up to 18% in several other mid-Western and plain states, an increase of from 19 to 36% in Montana, New Mexico, California and others, up to an increase of more than 30% in some states (Florida, Texas, Arizona, Nevada, Utah, Colorado, Wyoming and Idaho).

3) The labor force growth will slow down through the mid 1990s, with annual percentage increase of 1.7% for 1982-90, and about 1% for 1990-95.

4) Through the mid-1990s, women will continue to account for more than half of the growth in the labor force, 65-70% of growth 1982-1995.

5) The number of workers in the prime working ages will grow dramatically through the 1990s.

6) Industries providing services will continue to employ an increasing proportion of the work force.

7) Changes in employment will vary widely among industries through the mid 1990s. Agriculture declines but everything else increases with notable increase in manufacturing, trade and services.

8) Due to replacement needs, even occupations which are growing slowly can have many job openings. Projected growth in employment for secondary

school teachers 1982-95 is some 12.5%, roughly 1.3 million projected replacement openings. For drafters, these figures are 5% for growth and 500.000 projected replacement openings, 1982-95.

Mr. Kutscher discussed whether or not the "shrinking middle class" was myth or reality, showing that analysis proves it to be the former. He also discussed equally authoritatively some new occupational separation data improved estimates of job replacement needs, and spoke about the future impact of technology on work and education. U.S. employment is expected to undergo vast changes in structure. Whereas the part of technological change seems to be increasing, the pace varies considerably from one industry to the next, as well as from one plant to the next. U.S. Bureau of Labor Statistics research shows that technological change when introduced displaces few workers but is more likely to dislocate them. He concluded that technology brings change and that in the long run society benefits from these changes. In the short to medium term dislocations take place but these are often, if not more than often, associated with demand shifts. The speed with which technology is predicted to advance is usually overestimated.

A session with M. Jacques Legendre, the Mayor of Cambrai, France, and a former Deputy and Minister followed. M. Legendre, formerly Minister of State dealing with Job Training (1977-1981) has participated in a OECD sponsored study of the German Youth Training System prior to becoming Mayor of Cambrai in 1983. He spoke on "Job Training and the Role of Government"; which he saw as varying considerable from one state to another, depending on forms of government in existence in the particular states. In his view, the firm's role should be the starting point in order to define the proper role of government. Job training should primarily be the business of firms, it is within them and possibly among them that problems must be met. The aim of job training is to ensure that the level of skill of the workforce will enable individual firms to be as economically efficient as possible. M. Legendre spoke eloquently for the case of free enterprise. This, however, does not mean total laissez faire. He then addressed the role and purpose of the necessary social dialogue, which is more than simple negotiation between management and unions. Apart from encouraging social dialogue, the government has three further types of responsibilities. They are:

- in the field of industrial policies
- in that of initial training in education
- in the field of research on job training.

He concluded by stating how he felt government should conduct itself in these areas. One of the paradoxes of job training is that everyone declares it to be necessary, yet it is almost impossible to arrive at any quantitative measure of effectiveness. The lack of measuring instruments makes the type of international conferences as the present one extremely useful, as one would have to, somehow, rise above the national context which is the normal frame of reference. This was a balanced and interesting presentation. M. Legendre reminded us that 20% of French firms with more than 10 employees account for 80% of the total workforce.

The day ended with a presentation by John Evans, Research Officer at the European Trade Union Institute in Brussels and Ronnie John Snow, Director of Development and Research, Communications Workers of America. These labour unionists addressed the topic of "Trade Unions, Technology and Job Creation: A Transatlantic Contrast?". It was a fairly interesting but totally surprise-free presentation.

The last day of conference started with a symposium. Various trends and topics which had been discussed throughout the sessions were pulled together and examined. They included:

- demography,
- social change,
- demands for quality,
- leisure time, and
- psychological change.

Never before has civilization been so intoxicated with change. One of the agreed upon very useful distinctions which was introduced by one of the delegates was between "splitting the difference" vs "upgrading the common interest". This goes for virtually all types of negotiations, bargaining situations on even conflictual cases. The main question is how do we get from stage one to stage two? Change, in many ways, is relatively slow. Most changes in employment will not be in "high tech", but in the service industry. Long term demographic trends are therefore very important. How important will the small firms be in generating employment opportunities? What is the role of government (again)? What would the rise of Japan mean in all of this? These topics were all touched upon.

In the end it was generally agreed that growth vs. non-growth is in fact a false dichotomy. What matters is the <u>type</u> of growth, which ought to be organic. Economies and politics cannot really be separated in the final analysis. Both competition and security are needed. In a practical sense it was realized that a much greater exchange of ideas and information was needed to prevent a new social, cultural split to open up between the U.S. and Europe.

The closing session was by Peter Bottomley, MP and Minister of State, U.K. Department of Employment, who spoke on "Unemployment: What can governments do?" Mr. Bottomley, an MP since 1975 felt there were 3 1/2 things governments could do:

1) Pass laws
2) Use other peoples' money, real or imaginary
3) Use rhetoric

The 1/2 thing is to try to develop an understanding of what is really happening and explain this to people. Needless to say that whereas governments are busily pursuing the first three things, they ought to be concentrating more on the last 1/2.

During the discussion it became clear that this change could in fact take place and probably would - but in the long run. On this, relatively optimistic note, the conference ended.

CONCLUDING REMARKS

From a Canadian point of view this has been an interesting and fascinating conference. It has also been an important meeting in terms of attempted international bridge building, sorely needed these days. The opening gap - from a cultural and social point of view - between the U.S. and most of the Western European nations present should and could be bridged, and hopefully it will. As a Canadian in a context like this one finds oneself in a situation of understanding both sides of the argument and both 'worlds'. This is not a bad position to be in, if good use can be made of the knowledge and insight generated from the overall strategy of things.

FOOTNOTES

1. See, for example New Directions in Federal Tax Policy for the 1980s (Ballinger, Mass. 1983), and "The Political Response to Three Potential Major Bankruptcies: Lockheed, New York City, and Chrysler" in Toward a U.S. Industrial Policy (University of Philadelphia Press, Philadelphia, Pennsylvania, 1981).

2. German political sociologist and former Director of the London School of Economics.

3. According to Professor Marquand of Salfred, as quoted by Mark Bloom field.

4. This came as a surprise to the present author, who would have expected a shorter period for the American worker.

5. 2.5% and 2.3% respectively, as compared to 1.8% for the U.S.

6. According to Gerald Michael of Arthur D. Little, Cambridge, Massachusetts.

7. See report by Republican Congressional Task Force chaired by Congressman Ed Zschau.

8. The origin of this concept is attributable to the late Herman Kahn.

9. Mr. Miles is the author of The Poverty of Prediction (1975), Adaptation to Unemployment? (1983; SPRU Occasional Paper), and Social Indicators and Human Development (in press); co-author of The New Service Economy: Demystifying Social Statistics (1979), The Poverty of Progress (1982).

10. Alvin Toffler discusses this phenomenon at some length in his recent book Previews and Premisses (1984). People are no longer either producers *or* consumers, but can - and will increasingly - be able to be both simultaneously or, as he calls them 'prosumers'.

11. His publications include: "New Life for Formal Planning Systems", Journal of Business Strategy (1979); "How Europe's 'Help' for R & D Just Hurts, The Wall Street Journal (March 21, 1984); "Strategic shifts mean a new continental drift, Electronic Business (August 1, 1984); "The Rediscovery of Logistics", Harvard Business Review (September/October 1984).

ANNEX I

Why Europe Lags in Creating More Jobs

Red tape, welfare payments and hefty fringe benefits all work against revitalization of industry on the Continent.

GENEVA

America's steady economic expansion is impressive in itself to Europeans, but they are stunned by the creation of millions of new jobs that is accompanying the resurgence in U.S. business vitality.

The result is an abrupt reversal of roles between the U.S. and Western Europe. In the 1970s, U.S. economists looked to Europe for full-employment advice. Today, Europeans are studying America's job-generating success.

The strength of America's business recovery and its rapid decline in unemployment "astound" leaders of other nations, said U.S. Treasury Secretary Donald Regan after the recent economic summit conference in London.

West German economists now refer to the "American employment miracle." They are acutely aware that since the business upturn began in late 1982, the U.S. has added 6 million jobs while employment in Europe has fallen.

Further, America's unemployment rate has dropped from a peak of 10.7 percent to 7.5 percent. In Europe, by contrast, joblessness keeps edging higher. The rate now is 11 percent in the 10-nation Common Market. It runs 13 percent in Italy and 20 percent in Spain. Over all, Western Europe has almost 20 million people out of work.

Remarkable gain. America's long-term record awes the Europeans even more. Between 1970 and 1984, the U.S. gained 26 million jobs. During the same period, employment fell in West Germany—Europe's strongest economy—and the Common Market as a whole lost 3 million jobs.

Upshot: Europe, unlike America and Japan, has been unable to provide work for the baby-boom generation that followed World War II. For people under age 25, current unemployment rates are about 24 percent in Britain, 34 percent in Italy and 43 percent in Spain—against a comparable 15 percent in the United States.

Why has America done so much better? Otto Lambsdorff, who has just resigned as West Germany's Economic Minister, says that U.S. job growth "reflects the greater flexibility of the American economic system and of management and labor there, as well as the administration's deregulation efforts."

Bernd Hof of the IW-Research Institute in Cologne, concurs: "The turnover of labor in American industry is about twice as high as in Germany—a sign of rapid innovation. It is significant that new jobs in America are created primarily in small and medium-sized firms. There is more room for private initiative and for aggressive forward strategies."

Experts agree that wage moderation has helped the U.S. job boom. Faced with soaring costs and pinched income, European companies have opted for productivity gains through labor-saving technology—and massive layoffs.

Basel's Bank for International Settlements noted in June that U.S. unemployment had declined "under the combined influence of a 10-year pause in real wage growth, much greater labor and entrepreneurial mobility and considerably improved profit rates."

Fiscal policies of the past two or three years also have been important, says Richard Layard of the London School of Economics. Tax cuts and deficit financing have been a force behind rising U.S. employment. Europe has tried to cut state spending and budget deficits at the expense of growth and jobs.

Basically, Europe's many structural rigidities and bottlenecks ill prepare it to cope with changing competitive conditions. Among major problems:

Labor costs. Real wages are out of line with productivity. Pension plans, vacation pay, maternity leave and other fringe benefits are much costlier than in America. Employers in Germany and France pay an extra 80 percent of basic wages for benefits. In Italy, it's 94 percent, against 38 percent in America.

Mobility. Pay differentials in Europe are too small to reflect varying skills and spur people to move between industries and regions. High minimum wages thwart hiring of young recruits. Laws make it hard and very costly to fire people. The average jobless period is two or three times that in America.

Work morale. Generous benefits to the jobless—60 to 90 percent of normal pay for long periods—lead people to stay on the dole or make extra money in the tax-free underground economy. A "vacation mentality" is widespread. German hands enjoy 40 days' paid leave and holidays; Americans average 20.

Innovation. Europe has been slow to discard old, obsolescent plants in steel, textiles, shipbuilding and other areas. Governments keep on subsidizing yesterday's jobs. Laws and educational hurdles make it harder than in America for talented people to start their own businesses. Venture capital is scarce.

Most long-run prospects are bleak. One forecast suggests that Britain's jobless, now about 3 million, could fall but still total 2 million in 1987.

The outlook in France, Italy and Spain is worse. All three must maintain restrictive policies to fight rampant inflation. By some estimates, Germany's unemployed will be cut modestly from 2.3 million now to 2 million by 1988.

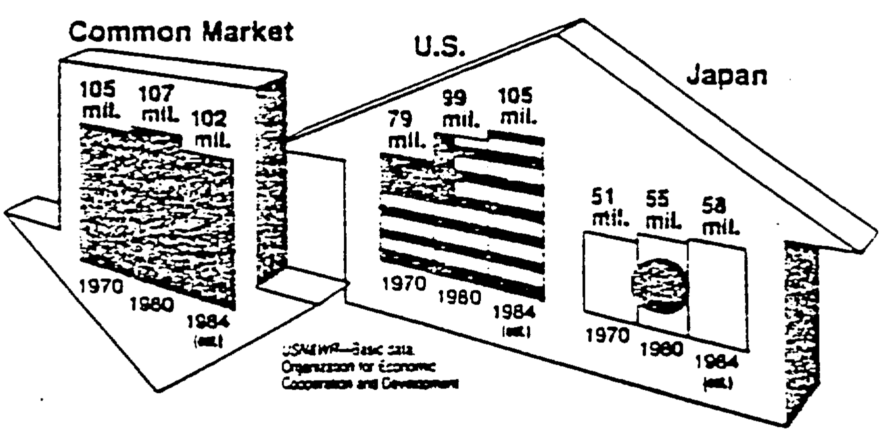
Yet newcomers still will outnumber those leaving the European labor market until about 1990. Another bad recession could mean 13 to 15 percent unemployed.

Job security is a big worry in Europe, though there are few signs so far of serious political tension. One reason: Social-security programs cushion living standards if jobs are lost. But growing long-term unemployment could become an explosive issue.

Today, welfare burdens, union power and government regulations have sapped Europe's once vigorous economy. America's free-enterprise system has proved itself able to create more jobs than Europe's bureaucratic welfare states.

By ALFRED ZANKER

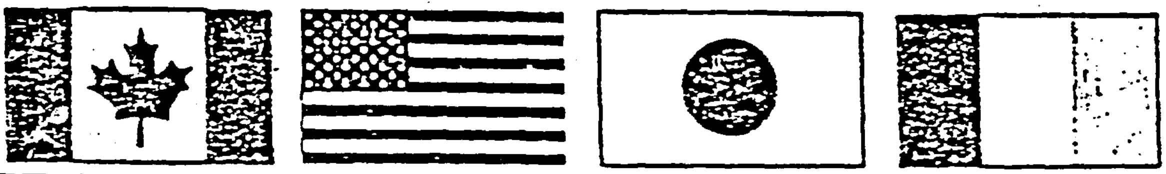
Job Decline—and Growth Civilian Employment



U.S.NEWS & WORLD REPORT, July 9, 1984

ANNEX II: SOME ECONOMIC INDICATORS

ECONOMIC PERFORMANCE OF SUMMIT NATIONS



UNEMPLOYMENT, 1967-85

IN PERCENT

COUNTRY	AVERAGE 1967-76	1977	1978	1979	1980	1981	1982	1983	1984	1985
Canada	5.6	8.1	8.3	7.4	7.5	7.5	11.1	11.9	11.3	11.2
United States	5.4	7.0	6.1	5.9	7.2	7.6	9.7	9.6	7.5	7.2
Japan	1.4	2.0	2.2	2.1	2.0	2.2	2.4	2.7	2.7	2.4
France	3.0	5.0	5.4	6.2	6.6	7.7	8.3	8.4	10.0	11.3
West Germany	1.7	3.9	3.8	3.3	3.4	4.9	6.8	8.2	8.1	8.1
Italy	6.0	7.2	7.2	7.7	7.6	8.3	9.0	9.8	10.4	10.7
United Kingdom	3.0	5.7	5.7	5.4	6.5	10.0	11.5	12.3	12.7	13.0

GNP, 1967-85

IN PERCENT

COUNTRY	AVERAGE 1967-76	1977	1978	1979	1980	1981	1982	1983	1984	1985
Canada	4.8	2.0	3.6	3.2	1.1	3.3	-4.4	3.3	4.7	3.2
United States	2.8	5.5	5.0	2.8	-0.3	2.5	-2.1	3.7	6.8	3.4
Japan	7.4	5.3	5.1	5.2	4.8	4.0	3.3	3.4	5.8	4.3
France	4.7	3.1	3.8	3.3	1.1	0.2	2.0	0.7	1.8	1.4
West Germany	3.5	2.8	3.4	4.0	1.9	-0.2	-1.1	1.3	2.6	2.8
Italy	4.3	1.9	2.7	4.9	3.9	0.2	-0.5	-0.4	2.6	2.8
United Kingdom	2.2	3.0	4.0	3.2	-2.6	-1.4	2.4	3.2	2.4	3.0

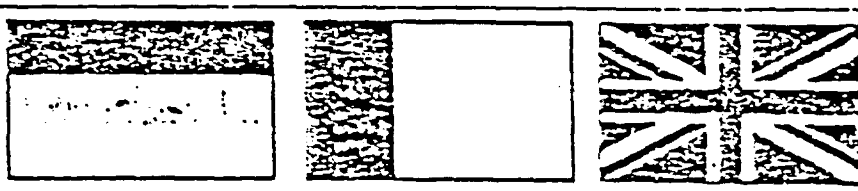
CONSUMER PRICES, 1967-85

IN PERCENT

COUNTRY	AVERAGE 1967-76	1977	1978	1979	1980	1981	1982	1983	1984	1985
Canada	6.0	8.0	8.9	9.1	10.2	12.5	10.8	5.8	4.4	3.6
United States	5.8	6.5	7.6	11.3	13.5	10.4	6.2	3.2	4.3	3.9
Japan	8.9	8.0	3.8	3.6	8.1	4.9	2.6	1.8	2.2	1.8
France	7.3	9.4	9.1	10.7	13.8	13.4	11.8	9.6	7.4	6.0
West Germany	4.3	3.7	2.7	4.1	5.4	6.3	5.3	3.3	2.4	2.3
Italy	8.5	17.0	12.1	14.8	21.2	18.7	16.3	15.1	10.7	9.0
United Kingdom	10.0	15.9	8.3	13.4	18.0	11.3	8.6	4.7	5.0	5.5

SOURCE: IMF WORLD ECONOMIC OUTLOOK

BY [illegible] FOR THE WASHINGTON POST



ANNEX III: LIST OF PARTICIPANTS AND THEIR AFFILIATION

BALDWIN, Nigel B	United Kingdom Group Captain, Royal Air Force; former Station Commander, RAF, Wyton; previously with US Air War College, Maxwell Air Force Base, Alabama; Officer Commanding SO Squadron (Vulcans).
BALDWIN, Stephen E	United States of America Staff Economist, National Commission for Employment Policy (an independent Federal advisory agency), Washington DC; previously Economist, US Bureau of Labor Statistics.
BEAVERS, Irene	United States of America Professor of Home Economics Education and Adult Education (program planning in and theories of adult education in home economics), Iowa State University, Ames, Iowa; involves direct research in adult and occupational education.
BELSER, Eduard	Switzerland Teacher and Headmaster of the Basel Schools of Nursing; Member of the Federal Parliament (Senator); previously member of the Basel local and legislative council and president of the Trade Union Congress.
BEYLIER, Guy Mme Madeleine Beylier	France Staff Vice President, Corporate Affairs Europe, Sperry Corporation, Brussels.
BRODMANN, Walter	Switzerland Economist; Head of Section for Economic and Monetary Affairs, Office for Foreign Economic Affairs, Federal Ministry of Public Economy, Berne; previously research assistant at Swiss Institute for Foreign Economic Relations and Market Research.

BURKHARDT, Hans-Martin	Federal Republic of Germany Head of Division Foreign Direct Investment, Ministry of Economics, Bonn; previously Counsellor, Permanent Representation to the European Communities, Brussels.
BUTLER, Nicholas (Nick)	United Kingdom Economist, Policy Review Unit, British Petroleum Company, London; formerly Research Fellow, Royal Institute of International Affairs, Chatham House, London.
CHRISTIANSEN, Gary B	United States of America Lawyer and Businessman; Partner in charge of international business transactions, Pillsbury, Madison & Sutro, San Francisco; formerly Managing Partner of London Office.
DANOS, Peter Mrs. Mary Adams Danos	United States of America Staff Vice-President, European Government Affairs, 3M Europe SA, Brussels; formerly Regional Vice-President responsible for Southern European Marketing Subsidiaries.
FALCK, Sven T	Norway Conservative Member of Parliament; Chemical Engineer; previously Operations Manager, Norsk Hydro A/S; Research and Development Engineer, Dow Chemical Co, Texas.
FELS, Alfred	Austria Head of Department, Ministry of Trade, Commerce and Industry, Vienna; responsible for trade relations and technology transfer with the USA and other countries; export promotion and financing.
GUIGNARD, James Mrs. Barbara Guignard	United States of America Director, European Office of the State of Carolina, Brussels; responsible for industrial recruitment (location of manufacturing plants in South

Carolina); economic diversification and employment creation; promotion of State's products and ports.

HEAL, Anthony R	United Kingdom Manager - Community Projects, British Petroleum Co., London; responsible for all community linked activity in UK by BP group; previously Legal Adviser (small joint venture companies) and Personnel Specialist (training and recruitment).
KAGAN, Sioma	United States of America Professor of International Business, School of Business Administration, University of Missouri-St Louis; Faculty Leader in Executive Development Programs (Universities & Corporations); consultant to leading corporations (IBM, General Electric, ARAMCO, etc.).
KLASEN, Sepp Frau Ingrid Klasen	Federal Republic of Germany Member of the Bavarian State Legislature and Chairman of the Committee for Complaints; former Civil Servant (Social Security) and Judge.
KROLL, Peter	Federal Republic of Germany Head of Division for Domestic Policy in the representation of the Land Berlin to the Federal Government in Bonn.
LEGENDRE, Jacques	France Mayor of Cambrai; Member of the Bureau, Regional Council of Nord Pas de Calais; Agrégé (Teacher) of History; former Minister of State for Job Training (Formation Professionnelle) and Member of Parliament for the Nord Region.
LILLY, Kip L	United States of America Regional Manager (Northwest Region), Chamber of Commerce of

	the United States, Minneapolis; formerly Administrative Assistant to the Mayor of St Louis; political aide; Farmer.
LINNENKOHL, Karl	Federal Republic of Germany Professor of Law (specializing in Labour Law), Faculty of Economics, University of Kassel; engaged in research into the effects of information technology on labour law, and questions of the restructuring of working hours.
LORENZ, Martin	Federal Republic of Germany Counsellor, Ministry of Labour and Social Affairs, Bonn.
MEDOM, Erik	Denmark Director, Education in Social Affairs, Home Guard Academy, Nymindegab; formerly worked in Insurance Branch; previously with Royal Danish Air Force.
MUELLER, Karl-Ulrich	Federal Republic of Germany Diplomat; Ministry of Foreign Affairs, Bonn; dealing with European and International Cooperation in Research and Development; previously served in Lagos and New York.
MURERO, Claudio	Italy Head of Economic Department, INTERSIND (confederation of state-controlled industries), Rome.
PEISCHER, Josef	Austria Senior Economic Adviser and Secretary to the President, Chamber for Workers' and Employees' for Upper Austria, Linz; mainly concerned with policy planning, research and development policy, regional economic and labour market policy.
PENDERGRAST, Dell F	United States of America Counsellor for Public Affairs, United States Mission to the European Communities, Brussels.

PREINFALK, Hans	Austria Senior Economic Adviser and Deputy to the Head, Department of Economics, Chamber for Workers' and Employees' for Upper Austria, Linz; mainly concerned with policy planning, energy policy, and implementation of new technologies in relation to working conditions and industrial relations.
PUIKKONEN, Juhani	Finland Head of Division in the Prime Minister's Office, Helsinki since 1973.
RANCE, Brian J	United Kingdom Deputy Personnel Director, Corporate Personnel Department, British Telecom, London; involved in pay negotiations, industrial relations, recruitment and employment policy and manpower management.
SCHOOTS, Jeroen F	Netherlands Head of Staff Industrial Policy and Analysis, Ministry of Economic Affairs, The Hague; previously responsible for sectorial policy in paper printing, offshore shipbuilding and textiles; former Assistant Professor of Political Science; Marketing Manager of Papermill.
SOLEM, Erik	Canada Senior Advisor, Political and Strategic Analysis Division, Policy Development Bureau, Department of External Affairs, Ottawa; immediate Past President, Canadian Nordic Society; Director, United Nations Association in Canada.
STEWART, Robert M Mrs. Patricia Stewart	United States of America Professor of Computer Engineering, of Computer Science and of Physics, Iowa State University,

	Ames, Iowa; Organiser and first Chair of Department of Computer Science from 1969-83.
VAN DER VAART, Sjerp Pieter	Netherlands Editor of "Het Financieele Dagblad" (The Financial Daily), Amsterdam; formerly free-lance journalist; Foreign Service officer; Historian.
VAN RAVESTEIN, Aalbert (Ab)	Netherlands Member, Research Department of Directorate for Economic Policy, Ministry of Economic Affairs, The Hague; previously served in the Directorate for Labour Market Policy, Ministry of Social Affairs.
VICKERY, Graham G	OECD Administrator (responsible for work on New Technologies and Industrial Change), Directorate for Science, Technology and Industry, OECD, Paris; formerly researcher, CSIRO (Australia); Editor, Australian Journal of Chemistry; held various posts in industrial companies; Australian national.
WEBER, Robert Mrs. Sally H	United States of America Freelance journalist and Lecturer at Santa Barbara City College; formerly President, Economic Development Corporation, Bangkok; Vice-President, Otto Gerdau Co, New York (Export-Import); President, Associated National Business Brokers, New York (merger brokers).
ZAMPAGLIONE, Giuseppe	Italy Economist, Directorate of External Relations and Staff; President of ENEA, Italian Commission for Nuclear and Alternative Energy Sources, Rome; formerly served in the UN International Atomic Energy Agency, Vienna.

ZIEGLER, Hans Volker	Federal Republic of Germany Head of Division for Internal Services, Federal Ministry for Research and Technology (BMFT), Bonn; formerly Head, Division for Personnel and Organization and Chef du Cabinet of the BMFT.

ANNEX IV: PARTICIPATING WILTON PARK STAFF AND THEIR BACKGROUND

DENTON, Geoffrey, R.	Director of Wilton Park and Wiston House Conference Centre since October 1983; specific interests in economic problems and European integration; studied Philosophy, Politics and Economics at Oxford University; after a number of posts in research institutes and universities was Reader in Economics at the University of Reading (1966-1984) and Director of the Federal Trust for Education and Research (1976-1983). Author of books and articles on the economics of European integration.
SPENCE, David J	Member of the Wilton Park Academic Staff since December 1979. Special interests include the political power of the media, theories of the State in modern political life, and political violence. Worked in business for several years in Germany, France and Britain before studying International Relations at Sussex University and doing research in Politics at the Universities of Oxford, Paris and Nice; subsequently taught courses in British politics at the Sorbonne.
STARKEY, Jim	Member of the Wilton Park Academic Staff since January 1976. Current responsibilities involve the planning of conferences on Defence and East-West matters, as well as conferences concerned with Technology, Industry and Employment; previously at the Universities of Manchester and Liverpool; taught English at a Lycée in South-Western France; taught in the Modern Languages Department of the University of Dijon and researched French Renaissance History.
STURROCK, Robert S	Member of the Wilton Park Academic Staff since 1959; graduate of the University of Glasgow in Modern European History, Political Economy and Modern Languages; also studied at the

Universities of Poitiers and Cologne; previously taught French at Kilsyth Academy (outer Glasgow), and English in the Deux-Sèvres, Western France; member of the London Association of Conference Interpreters (LACI); specially interested in constitutional affairs, internal nationalism and Scottish politics.