THE BRAZILIAN LABOUR MARKET IN THE 1990s

Leonardo Trevisan

Institute of Latin American Studies
31 Tavistock Square
London WC1H 9HA
The Institute of Latin American Studies publishes as Occasional Papers selected seminar and conference papers and public lectures delivered at the Institute or by scholars associated with the work of the Institute.

Leonardo Trevisan is Professor of Economics at the Pontificia Universidade Católica de São Paulo. He also writes regularly for "O Estado de São Paulo". In 1996-97 he was Visiting Research Fellow at the Institute of Latin American Studies.

Occasional Papers, New Series 1992-
ISSN 0953 6825

© Institute of Latin American Studies
University of London 1998
CONTENTS

Introduction ........................................ 1
The Formal Sector Job Market ...................... 2
A Demographic Approach to Unemployment ........ 6
The New Job Map .................................... 8
The New Employment Profile ...................... 11
Training – Great Hopes and Worrying Failures .... 14
The Productivity Question and Brazil’s Segmented Labour Market 17
Conclusions ........................................ 21
THE BRAZILIAN LABOUR MARKET IN THE
1990s

By Leonardo Trevisan

Introduction

The concept of a formal monthly-waged job has been under threat recently in Brazil. Between the 1940s and the 1980s the south-east sector of the country achieved considerable levels of industrialisation, so that there was a significant increase in formal, legally registered jobs. In 1940 for every ten workers with a formal wage, only three had legal registration. However, in the late 1980s the Brazilian labour market began to change. Between 1989 and 1995, only two out of ten new workers were in occupations with a formal wage and legal registration. Of the remaining eight, five were self-employed workers and the last three were not formal wage earners. All these figures confirm that, between 1989 and 1995, formal and legitimate employment decreased dramatically, while informal occupations increased, thus avoiding a rise in unemployment.¹

The changes in the Brazilian labour market began before the Constitutional Assembly in 1988, but undoubtedly these changes accelerated after the new Constitution was adopted. Between 1989 and 1995, the number of formal and legal jobs experienced a continuous negative rate of growth. In this six-year period, the number of unregistered jobs grew at a rate of 541,000 per year, while in the same period 351,000 legally registered, formal jobs were lost annually.

These figures serve to highlight an important trend. According to the 1996 Census of the Instituto Brasileiro de Geografia e Estatística (IBGE), the geographical and sectoral distribution of new jobs is a fundamental feature of the current Brazilian labour market. In the formal labour market the most notable tendency has been the transfer of industrial workers to the service sectors. The IBGE data record that in the 1990 Census industrial workers constituted 15.2 per cent of formal jobs. In 1996 this had fallen to 12.3 per cent. Meanwhile, according to the 1990 IBGE Census, 17.9 per cent of formal jobs were in the service sector; in 1996 this increased to 19.1 per cent of the regular workforce.²

The existence of sectoral transfers does not ensure stability in the formal labour market. There was no automatic transfer from the industrial to the

¹ The author would like to thank Leonardo Campos Filho for his suggestions on the bibliography.

² IBGE Census of 1996 (Rio de Janeiro).
service sector. Furthermore, the service sector experienced a significant statistical problem, since the IBGE data had not fully absorbed the effects of the dramatic downsizing on the principal formal employer of the service sector: the financial system. Brazilian banks dismissed 78,446 employees between June 1995 and June 1996 (the last month that the IBGE collected data for the Census). According to the bank employees’ union, dismissals within the sector accelerated between June and December 1996, affecting more than 120,000 bank employees.³

The geographical concentration of job losses in Brazil has been as significant as the sectoral loss of formal jobs. The past six years have witnessed the loss of 56.1 per cent of formal jobs within the nine principal Brazilian metropolitan regions. In São Paulo, the largest metropolitan region in the country, 30.2 per cent of the total formal jobs disappeared. It must be remembered that the Greater São Paulo region incorporates 10.8 per cent of the total Brazilian population. Indeed, this new employment situation has redrawn the Brazilian job map.

Essentially, the most important data in the 1996 Census is that concerning the social benefits connected to formal jobs. According to the 1990 IBGE Census, 50.1 per cent of those holding formal wage occupations had paid into the Instituto Nacional de Seguridade Social (INSS); in 1996 the IBGE reported that only 43.1 per cent of the Brazilian population who had jobs formally paid into the INSS. In 1996, the economically active Brazilian population stood at 74,138,441 people. This figure represents an increase of 9,670,460 since the previous Census in 1990. Within six years almost ten million new workers were competing for jobs in a labour market that had lost over 500,000 formal jobs per year.⁴ Only the informal economy could absorb the millions of workers looking for jobs.

The increase in the informal economy has profoundly altered the labour market. In contrast to other industrialised economies, Brazil does not have a strong programme to protect, with appropriate social benefits, those who work in the informal economy. Indeed, as the IBGE figures confirm, Brazil has made flexible the laws that traditionally protected the labour market. This ‘disguised flexibilisation’ has had serious effects on the Brazilian labour market.

The Formal Sector Job Market

Companies under pressure to compete efficiently in an open market have tended to transfer this pressure to their employees. It has been a natural movement driven by the law of survival of the fittest. However, in the Brazilian economy this ‘transfer of pressure’ has occurred at a time when the economic frontiers

⁴ Figures from IBGE Census of 1996 (Rio de Janeiro).
have been opened to international competition and the rate of exchange has made it difficult to increase the volume of exported products. The employers have felt the strain and they have had to learn the 'new rules of the game'. As a result, unemployment has increased as well as productivity. The reason for this is not easily explained. However, formal employment, inclusive of social benefits, has been seen as a 'privilege'. So in this situation every effort has been made to keep this 'privilege'. In the first place this has meant the increased use of 'overtime'.

Between 1985 and 1995 the legal working week fell from 46 to 43 hours. According to the Departamento Intersindical de Estatísticas e Estudos Socio-econômicos (DIEESE), the number of employees working longer hours than the legal working week increased from 22.4 per cent to 42.5 per cent during this same period. For example, in 1995, according to the Metalworkers' Union of Guarulhos (an industrial city in the Greater São Paulo region), 61 per cent of employees worked overtime. Furthermore, 33 per cent worked over 50 hours per week. The union confirmed that, in 1995, the average metal worker in Guarulhos worked between 42 and 51 hours per week.

Working conditions varied greatly in different sectors. In the same period, according to the DIEESE, the formal working week in the retail sector fell from 50 to 46 hours, but the percentage of workers doing overtime rose from 41.8 per cent in 1985 to 55.1 per cent in 1995. The same trend is apparent in the service sector: between 1985 and 1996 the working week fell from 43 to 41 hours; nevertheless, in 1985 23.8 per cent of the employees were working overtime.

The conclusion of the DIEESE study points to the principal reason for this increase in overtime: without the prospect of a sustainable increase in economic activity, companies preferred paying for overtime work instead of hiring new employees. The DIEESE study concluded that the level of production had been easily controlled by these overtime policies. Employers were more willing in some cases to pay double wages than to hire new employees. Employers consider the cost of dismissal excessively high. The DIEESE study did not address this point, but the rights of workers included in the 1988 Constitution have undoubtedly worried employers.

The question of improved productivity runs deeper than the mere cost of

---

5 In 1996, research from the Confederação Nacional da Indústria (CNI), the principal Brazilian employer in the industrial sector, showed that employees were willing to take on more work, if the job carried guarantees. This research, carried out at a national level, showed that 72% of workers agreed to more hours/work in exchange for their continued employment and 62% agreed to a reduction in their vacation allowance. However, 78% of industrial workers opposed salary cuts even in return for job security and 66% rejected cuts in social benefits under the same conditions. These cuts were seen as unacceptable in a country in which salaries are already low and social benefits minimal. Full research results were published in O Globo, 3 July 1996.


7 Research from Metalworkers' Union of Guarulhos, Aruja, Mairipora and Santa Izabel published in O Estado de São Paulo, 2 March 1997.
dismissal or a simple control of production using overtime. The industrial relations theory underpinning this perspective does not take into account the direction and the demands of the new economic situation. The method of increasing productivity by placing damaging pressure on the workforce is a short-term vision. Such behaviour is typical of sectors (or segments of sectors) that are resistant to the acceptance of new economic conditions. The DIEESE studies have noted the rise in productivity in different industrial sectors, without questioning the reasons for this higher level of productivity – whether through investment in research and development, retraining workers, or merely through exploitation of the workforce.

Unemployment has risen alongside productivity. The best example is found in the automobile industry. In July 1996 this sector sold 26 per cent more than in July 1995. However, in July 1996 the automobile companies had 114,100 employees, 10,400 less than in July 1995. There are two possible explanations for this situation: new techniques of production or merely new work methods causing continuous job losses.

There now appears to be a big difference between the Brazilian economy’s capacity to create jobs and the number of new job seekers in the Brazilian labour market. The 1996 IBGE Census showed this difference to be considerable. While the economy was growing between 1995 and 1996, job offers increased by 1.7 per cent. However, the economically active population (people in work or those seeking it) rose by 3.1 per cent in the same period. Another important 1996 Census finding is the fact that in June 1996 the number of formal jobs with legal registration had fallen by 9.1 per cent in comparison with June 1995.

The second feature of the Brazilian economy concerns the salaries of formal sector workers. The Confederação Nacional da Indústria (CNI) conducts monthly research on wage levels and in 1996 revealed two important findings:

– the total of the net wages paid in 1996 for formal jobs was 3.55 per cent less than in 1995
– the real average wage paid in 1996 had risen by 6.1 per cent in comparison with 1995.

This figure, published by a respected employers’ organisation, has confirmed a serious tendency in the Brazilian labour market. The average wage rose because the number of workers has been declining for the last five years. The total number of salaries was lower but, when this total was shared between fewer people, the average increased. The workers who keep their jobs need to work harder and longer hours than the previous year.

---

8 Figures for automobile sector performance were published in O Estado de São Paulo, 11 Aug. 1996.
Workers with specialised skills kept their jobs and their hours increased. During the last annual wage campaign, the Sindicato dos Metalúrgicos de São Paulo (the largest and strongest union of the Brazilian industrial sector) claimed ‘nowadays it is common for employees to operate five different machines by themselves’. The union also claimed ‘they (the São Paulo metalworks employees) do everything, even clean the machines and the ground where they work’.

The IBGE Census figures provide important information on the new Brazilian labour market. Between 1990 and 1996, formal sector jobs fell by 34.2 per cent. The same IBGE figures show that Brazil’s economically active population had risen by 8.7 per cent in the same period – a real difference of almost ten million people. Despite this, unemployment in Brazil has been low, even in comparison with other industrialised countries. Between 1990 and 1996 the average unemployment rate was 5.3 per cent. According to the IBGE Monthly Research in July 1997, this rate had remained at practically the same level: 5.91 per cent. Clearly, it was only the expansion of the informal economy that prevented any real rise in unemployment. There have been profound changes in the labour market and these provide the first explanation for these low unemployment rates.

As in other countries, the definition of unemployment in Brazil is widely debated. The first problem is that there are several unemployment rates, all of which are calculated using different methodologies. Brazil does not have a national unemployment rate covering the 27 states of the Brazilian federation. Unemployment rates are only recorded for some regions. Figures from the Ministério do Trabalho (Ministry of Labour) record the gains and losses of jobs within the formal economy. Brazil has 1.5 million registered companies, but only 374,000 reported hiring or dismissal of workers. In 1997, the Ministry of Labour and the Ministry of Finance began a special programme to cross-reference fiscal and social information files from the Relação Anual de Informações Sociais (RAIS), giving a range of social information that each firm is obliged to provide to the Ministry of Labour annually.

In calculating unemployment rates, the IBGE considered only the six principal Brazilian metropolitan regions, including the informal economy but with a narrow definition of ‘length of unemployment’. The IBGE complies with all the rules of the International Labour Organisation (ILO) and defines an unemployed person as someone who is not actively working, which normally has been known as ‘open unemployment’. The DIEESE, by contrast, has only completed data collection on the Greater São Paulo region. However, the DIEESE approach to the calculation of the unemployment figures includes all those over ten years old, if the person has already worked or is just looking for a

10 Comments published in O Estado de São Paulo, 18 Nov. 1996.
job. The DIEESE applies two definitions, ‘open unemployment’ and ‘hidden unemployment’ which includes those who have had some paid work in the last 30 days but without regularity. Using these different methods, in August 1997 the IBGE declared that 6.4 per cent of the economically active population was unemployed, the Ministry of Labour claimed an unemployment rate of 5.7 per cent and the DIEESE stated that the unemployment rate of Greater São Paulo was 15.7 per cent.

**A Demographic Approach to Unemployment**

The different factors behind low unemployment rates have been the topic of heated debates. Research by the Instituto de Pesquisas Econômicas e Aplicadas (IPEA), based on *Pesquisa Mensal de Emprego do IBGE*, contributed a new and important perspective to this debate. These figures highlighted the significant reduction in youth employment in the Brazilian labour market. According to IBGE/IPEA data, in 1991 the participation of children and teenagers (up to 14 years of age) in the labour market reached 7.01 per cent. In 1995 their participation had fallen to 4.5 per cent. The reduction in employment of 15-17 year olds has been even more striking. In the 1990 Census 41.9 per cent of youngsters in that age range were employed; yet in 1995 this fell to just 31.7 per cent. For 18 to 24 year olds, participation in the labour market also fell, from 78.8 per cent in 1990 to 72.07 per cent in 1995. IPEA data can be used to show how the Brazilian labour market is distributed among ages as Table 1 shows:

<table>
<thead>
<tr>
<th>Year</th>
<th>0 to 14 years</th>
<th>15 to 17 years</th>
<th>18 to 24 years</th>
<th>25 to 29 years</th>
<th>30 to 39 years</th>
<th>40 to 49 years</th>
<th>50 to 59 years</th>
<th>60 to 64 years</th>
<th>65 years or over</th>
</tr>
</thead>
<tbody>
<tr>
<td>1991</td>
<td>7.01</td>
<td>39.21</td>
<td>76.89</td>
<td>96.89</td>
<td>n.a.</td>
<td>82.28</td>
<td>58.46</td>
<td>36.60</td>
<td>14.13</td>
</tr>
<tr>
<td>1992</td>
<td>5.69</td>
<td>35.12</td>
<td>74.18</td>
<td>94.50</td>
<td>97.29</td>
<td>80.36</td>
<td>57.03</td>
<td>35.70</td>
<td>13.34</td>
</tr>
<tr>
<td>1993</td>
<td>5.22</td>
<td>32.49</td>
<td>72.93</td>
<td>93.84</td>
<td>96.72</td>
<td>79.55</td>
<td>56.23</td>
<td>34.05</td>
<td>12.55</td>
</tr>
<tr>
<td>1994</td>
<td>4.19</td>
<td>31.94</td>
<td>72.57</td>
<td>94.55</td>
<td>97.11</td>
<td>80.94</td>
<td>56.87</td>
<td>32.21</td>
<td>12.18</td>
</tr>
<tr>
<td>1995</td>
<td>4.56</td>
<td>31.07</td>
<td>72.07</td>
<td>94.95</td>
<td>96.96</td>
<td>81.22</td>
<td>57.31</td>
<td>33.02</td>
<td>12.65</td>
</tr>
</tbody>
</table>

n.a. – not available

The abundance of young people within the Brazilian population has had numerous implications. The unemployment rates have been kept low due to the

---

reduction of youth employment. Figures from the past six years show evidence of almost continuous levels of employment except among young employees. Clearly, young people had left the positions that they previously occupied in the labour market and these same youngsters have been registered, statistically, as students. In the long term this will probably produce a better-educated Brazilian workforce. For the present, as the IBGE figures confirmed through the IPEA study, defining young workers as students results in a low unemployment rate. This contributes to a sociological phenomenon termed 'first job delay', and statistics have confirmed a generalised occurrence of this phenomenon in the Brazilian labour market.

Another fundamental factor in the low unemployment rate is connected to the amount of hiring activity in comparison with dismissals. According to Cadastro Geral de Empregados e Desempregados do Ministério do Trabalho, 1991 and 1992 were two peak years for dismissals, totalling 580,000 and 602,000 respectively. However, between 1993 and 1995 the number of dismissals stabilised. The Ministry of Labour study showed that hiring had become extremely selective, but the number of dismissals was also low.

This hiring pattern demonstrates a new profile in the Brazilian workforce. According to Ministry of Labour data, new male employees were on average 1.6 years younger and paid salaries 18 per cent lower than dismissed workers. The new female employees were 1.8 years younger and paid salaries 10 per cent lower than their dismissed counterparts. The difference between the new male and female employees increases when education is also factored into the equation. While the dismissed male and the new male employees had basically the same level of schooling (approximately six years), the new female employees had one year of schooling more than their dismissed counterparts. The data also shows that female workers in the Brazilian workforce had on average completed eight years of schooling, two years more than the average for males.13

A direct female presence on the production line represents an important social opportunity and contributes to the evolution of the Brazilian workforce. Since the early 1980s, IBGE data have recorded the consequences of such changes. They point to the fact that as the years of schooling rise in the workforce due to this female presence, the average age of Brazilian workers has fallen, due to the lower average age of female employees.14

Obviously, low national rates of unemployment did not rule out high unemployment in certain sectors of the workforce. The above mentioned study by IPEA demonstrates an impressive array of different dismissal rates since 1993. Some graduate professions recorded significant losses, for example economists (7,000 between 1993 and 1995), engineers and architects. Between

---

13 Figures from Cadastro Geral de Empregados e Desempregados do Ministério do Trabalho (Brasilia: Ministério do Trabalho, 1997).
14 Censo Industrial de 1985 (Rio de Janeiro: IBGE).
1993 and 1996, 32,000 managers lost their jobs. The number of managers losing their jobs was practically identical to the number of dismissed workers without specific skills or graduate study.

**The New Job Map**

The past six years confirm that in national terms there is a stabilising tendency within the Brazilian labour market, as the IBGE figures have shown. However, this disguises important differences between metropolitan areas, Brasilia and the Atlantic coast. Metropolitan area unemployment has its own features demanding specific analysis. Industrial concentration is a primary feature, with a number of very serious social consequences.

The 1996 IBGE figures showed that the national average for industrial production rose 10 per cent between 1994 and 1996. However, while output in Santa Catarina (in the south) increased 16 per cent per year and in Minas Gerais (south-east) 13.7 per cent per year, in São Paulo, a traditionally industrial state, output rose only 7.7 per cent and in Rio Grande do Sul, another traditionally industrial state, production hardly increased at all.

Figures on job creation show that Minas Gerais led the demand for labour in 1996, when the state created 61,778 new jobs while São Paulo shed 55,000 jobs in the industrial sector. This maintained the pattern set in 1995 when Minas Gerais had created 28,000 new jobs and 48,000 workers in the São Paulo industrial sector were dismissed.

These consequences need to be carefully analysed. For example, Ministry of Labour figures show that in São Paulo the average salary was R$504 per month (roughly US$450 at the 1998 exchange rate); meanwhile in Minas Gerais the average salary was R$269 (US$233). Besides such salary advantages, Minas Gerais enjoyed a fiscal advantage; in São Paulo the Imposto sobre Circulação de Mercadorias (ICMS), similar to the Value Added Tax (VAT), was maintained at 18 per cent while the same tax in Minas Gerais was cut to 12 per cent.

Fiscal concessions have been introduced by other Brazilian states in order to attract investors. Ceara in the north-east provides a good example. Besides the reduction of ICMS to 12 per cent as in other states, the Ceara government offered a subsidised loan to manufacturing companies that located in the state. The effort to attract investors was very successful. Between 1990 and 1996, Ceara had 366 new industrial projects creating 77,341 new jobs. During this period, according to the IBGE, total investment in Ceara reached R$4.6 billion (US$4.2 billion).

However, the reduction of ICMS had serious consequences. There was a reduction in the national participation of tax revenue from states that had offered strong tax incentives. For example, Minas Gerais in 1990 contributed
10.4 per cent of the national ICMS revenue. In 1996, with thousands of new industrial jobs created, this rate had fallen to 9.7 per cent. According to IBGE figures, the results were the same for other states that reduced their tax rates. There has been a significant shift in resources between different Brazilian economic regions and specific states as a result of these new investments. Table 2 shows regional Gross Domestic Product (GDP) with each state’s evolution since 1970:

Table 2 – Regional GDP
States GDP Participation in Total Brazilian GDP
(Percentage per year)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>North (total)</td>
<td>2.2</td>
<td>3.5</td>
<td>4.9</td>
<td>South-east (total)</td>
<td>65.2</td>
<td>62.1</td>
<td>57.2</td>
</tr>
<tr>
<td>Rondônia</td>
<td>0.1</td>
<td>0.3</td>
<td>0.6</td>
<td>Minas Gerais</td>
<td>8.4</td>
<td>9.6</td>
<td>9.3</td>
</tr>
<tr>
<td>Acre</td>
<td>0.1</td>
<td>0.1</td>
<td>0.2</td>
<td>Espírito Santo</td>
<td>1.2</td>
<td>1.5</td>
<td>1.6</td>
</tr>
<tr>
<td>Amazonas</td>
<td>0.8</td>
<td>1.2</td>
<td>1.3</td>
<td>Rio de Janeiro</td>
<td>16.1</td>
<td>13.2</td>
<td>10.5</td>
</tr>
<tr>
<td>Roraima</td>
<td>0.0</td>
<td>0.0</td>
<td>2.2</td>
<td>São Paulo</td>
<td>39.5</td>
<td>37.8</td>
<td>35.8</td>
</tr>
<tr>
<td>Tocantins</td>
<td>0.0</td>
<td>0.2</td>
<td>0.1</td>
<td>South (total)</td>
<td>17.0</td>
<td>17.4</td>
<td>17.4</td>
</tr>
<tr>
<td>North-east (total)</td>
<td>12.0</td>
<td>12.2</td>
<td>13.7</td>
<td>Paraná</td>
<td>5.5</td>
<td>6.5</td>
<td>6.6</td>
</tr>
<tr>
<td>Maranhão</td>
<td>0.9</td>
<td>0.9</td>
<td>1.1</td>
<td>Santa Catarina</td>
<td>2.8</td>
<td>2.9</td>
<td>3.4</td>
</tr>
<tr>
<td>Piauí</td>
<td>0.4</td>
<td>0.4</td>
<td>0.5</td>
<td>Rio Grande do Sul</td>
<td>8.7</td>
<td>8.0</td>
<td>7.3</td>
</tr>
<tr>
<td>Ceará</td>
<td>1.5</td>
<td>1.5</td>
<td>1.6</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rio Grande do Norte</td>
<td>0.6</td>
<td>0.6</td>
<td>0.9</td>
<td>Centre-west (total)</td>
<td>3.6</td>
<td>4.8</td>
<td>6.9</td>
</tr>
<tr>
<td>Paraíba</td>
<td>0.7</td>
<td>0.7</td>
<td>0.8</td>
<td>Mato Grosso do Sul</td>
<td>0</td>
<td>0.6</td>
<td>1.3</td>
</tr>
<tr>
<td>Pernambuco</td>
<td>3.0</td>
<td>2.6</td>
<td>2.5</td>
<td>Mato Grosso</td>
<td>1.1</td>
<td>1.1</td>
<td>1.0</td>
</tr>
<tr>
<td>Alagoas</td>
<td>0.7</td>
<td>0.7</td>
<td>0.8</td>
<td>Goias</td>
<td>1.6</td>
<td>1.7</td>
<td>2.2</td>
</tr>
<tr>
<td>Sergipe</td>
<td>0.4</td>
<td>0.4</td>
<td>0.7</td>
<td>Distrito Federal</td>
<td>0.9</td>
<td>1.4</td>
<td>2.3</td>
</tr>
<tr>
<td>Bahia</td>
<td>3.8</td>
<td>4.4</td>
<td>4.6</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BRAZIL</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Considera, C. (1997) IPEA, Pesquisas sobre PIBs Estaduais

One of the most striking features of Table 2 is the decline in importance of São Paulo. Investors deciding to leave São Paulo and invest in other Brazilian states had to consider three different factors: access to a consumer market, the level of training in the workforce (for example, Minas Gerais has industrial workers with an average schooling level higher than that of São Paulo) and the quality of the transport system and energy supply. Different states in Brazil have improved these conditions for investors and have also promoted the idea
of a labour movement that does not make great demands.\textsuperscript{15}

According to the IBGE Census, between 1994 and 1996 (the last national data available) São Paulo still attracted 29.6 per cent of total investment. In second place was Minas Gerais with 19.8 per cent of the total, followed by Paraná at 10.1 per cent and Rio de Janeiro with 8.5 per cent. However, in São Paulo investment has been shifting geographically towards the centre of the state. That is an important point in the new Brazilian job map. As with other metropolitan areas, the city of São Paulo no longer attracts industrial investment. As in other industrialised countries, changes within the Brazilian job map have meant that industrial investment has been moving out of the metropolitan areas.\textsuperscript{16}

According to the 1996 IBGE Census, the unemployment rate in the six Brazilian greater metropolitan areas was double the national average as a consequence of this loss of industrial investment. There are several possible explanations for this rise in the metropolitan unemployment rate, but the most significant has been the 'deindustrialisation' process. The cities of Porto Alegre, São Paulo, Belo Horizonte and Rio de Janeiro recorded unemployment rates of over 14 per cent in 1996. Salvador and Recife, capitals of the north-eastern states of Bahia and Pernambuco respectively, recorded unemployment rates of 13.6 per cent in 1996. It is important to note that the large-scale industrial investment in Minas Gerais did not reach Belo Horizonte, the state capital. Unemployment rates in Belo Horizonte were higher than in other capitals in the south-east.\textsuperscript{17}

The concept of unemployment in metropolitan areas entails two different criteria: 'open' and 'hidden' unemployment. The first criterion refers to absolute unemployment without any possibility of work. The second criterion includes disguised unemployment including all the features covered by the informal economy and very low quality jobs. According to the 1996 IBGE Census, 47 per cent of the economically active population operate at least in part in the informal economy.

These figures have generated heated debate as mentioned earlier. The

\textsuperscript{15} For example, Black & Decker closed a factory in São Paulo and built a new one in Uberaba, Minas Gerais state. Claudio Miers, Human Resources Director of the company, said that he had reached a special agreement with the local union for a new manufacturing plant in Uberaba, which he had been unable to achieve in São Paulo. Interview published in \textit{Gazeta Mercantil}, 2 Sept. 1997.

\textsuperscript{16} According to Ministry of Labour figures, in 1996 the six principal metropolitan areas were responsible for only 30,512 of the 318,422 new formal sector jobs created in Brazil; \textit{Cadastro Geral de Empregados e Desempregados do Ministério do Trabalho} (Brasilia: Ministério do Trabalho, 1997).

\textsuperscript{17} According to \textit{Economic Monthly Research} of the Fundação João Pinheiro, in July 1997 the economically active population in Belo Horizonte stood at 1,753,876 people, of which 238,789 were unemployed. According to Ministry of Labour figures, between January and August 1997, 71,816 formal jobs had been created in Minas Gerais; 55,240 of these jobs were in the interior of the state with only 16,576 in the Belo Horizonte metropolitan area.
metropolitan areas offer huge possibilities for informal employment, providing an escape valve for those hit by unemployment. However, there has recently been a limit on the growth of informal sector employment opportunities. Furthermore, the Brazilian privatisation process is not yet complete. When that happens, it will lead to dramatic changes in formal job structure and the formal unemployment rate. Last, but not least, when the Administrative Reform of the State in Brazil is finally passed in Congress, municipal government will no longer be the largest employer. When the Administrative Reform permits dismissal of public servants – due to the poor financial health of bankrupted councils – the Brazilian unemployment rate will no doubt be much higher.18

The New Employment Profile

The new geographical distribution of jobs has led to rethinking regarding employment in the Brazilian labour market. First of all, the new employment pattern has created another kind of excluded worker in the formal workforce. In 1985, DIEESE research showed that 30.2 per cent of male workers with eight years experience were unemployed in the Greater São Paulo area. In 1995, 43 per cent of the male workers with the same characteristics were unemployed in the same metropolitan area. All of them were over 40 years old.19 According to the IBGE, male unemployment figures at the national level have risen at a similar rate. The national unemployment rate among males between the age of 40 and 49 reached 15.9 per cent in the 1996 Census, roughly three times the national average of 5.7 per cent. This confirms that the dismissal process hit those with higher salaries on the production line first, discriminating against male workers with a slower capacity to adapt to new work methods.

The search for a new job in São Paulo required an average of 20 weeks, according to 1996 data from the Fundaçao Sistema Estadual de Analise de Datos (SEADE). However, when this search was conducted by those aged 40 and above, the ‘waiting season’ rose to an average of 26 weeks. According to the same research conducted in 1995, these male job seekers were waiting an average 24 weeks before finding a new job. In 1993, 40 to 49 year old unemployed males waited an average 16 weeks before securing a new position.20 There has obviously been a constant squeeze on the possibilities for unskilled workers in the Brazilian labour market.

However, this ‘squeeze’ raises other questions. A serious decline has been

18 An economic projection elaborated by Professor Siegfred Bender of the Fundação Instituto de Pesquisas Econômicas of the Universidade de São Paulo (FIPE), confirmed: if and when the Social Insurance Reform has been concluded, the Brazilian Gross National Product will increase by 1.8%; with the Fiscal Reform 1.5% and with the Administrative Reform, 0.4%. According to Bender’s calculations, a 20% reduction in public servant expenditure would allow R$5.5 billion (roughly US$5 billion) in new state investments. The Siegfred Bender interview was published in O Estado de São Paulo, 2 Nov. 1997.
19 Figures from Anuario do Trabalhador 96/97 (São Paulo: DIEESE, 1997).
20 Figures from Pesquisa de Emprego e Desemprego (São Paulo: SEADE, 1996).
recorded in employment in the industrial sector, which in Brazil offers better job quality than any other. According to IBGE data, in 1995 industrial jobs had decreased 17.8 per cent in comparison to 1985, and 35 per cent in comparison to 1989. Each industrial job lost contributed to the overall deterioration of average job quality in Brazil.

According to IBGE figures, the service sector comprised 45.8 per cent of total jobs in 1986, rising to 54.3 per cent in 1995. The increase in service sector jobs contributes to the general problem of job quality. Job quality in the service sector is more precarious than in the industrial sector. This is confirmed by the rate of workforce rotation in different sectors of the Brazilian economy. According to 1995 Ministry of Labour figures, 47 per cent of workers in the industrial sector worked less than two years in the same company. In the service sector this rose to 61 per cent and in the building sector it reached 80 per cent. Jobs in the industrial sector in Brazil may have been hard to come by, yet they remain of higher quality than any other.21

Among 12 industrialised countries (see Table 3) Brazil has the highest rate of workforce rotation, although it is important to note the next highest is found in the United States:

Table 3
Labour Turnover
Average percentage of workers with less than two years in the same company

<table>
<thead>
<tr>
<th>Country</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Italy</td>
<td>13</td>
</tr>
<tr>
<td>Belgium</td>
<td>18</td>
</tr>
<tr>
<td>Germany</td>
<td>21</td>
</tr>
<tr>
<td>France</td>
<td>22</td>
</tr>
<tr>
<td>Ireland</td>
<td>22</td>
</tr>
<tr>
<td>Denmark</td>
<td>27</td>
</tr>
<tr>
<td>Finland</td>
<td>28</td>
</tr>
<tr>
<td>Holland</td>
<td>28</td>
</tr>
<tr>
<td>England</td>
<td>31</td>
</tr>
<tr>
<td>Canada</td>
<td>33</td>
</tr>
<tr>
<td>United States</td>
<td>39</td>
</tr>
<tr>
<td>Brazil</td>
<td>47</td>
</tr>
</tbody>
</table>


Obviously, lower job quality has a significant influence on Brazil’s capacity to compete. An interesting research paper, published by a Brazilian investment bank, analyses the question of jobs in Brazil as a problem of ‘low productivity’.

21 Figures from Cadastro Geral de Empregados e Desempregados (Brasilia: Ministério do Trabalho, 1997).
This study, written by Gustavo Gonzaga, a lecturer in the Economics Department of the Pontificia Universidade Católica do Rio de Janeiro, argued that the real issue in Brazil has been job quality, not quantity, connected to the low productivity of the Brazilian workforce. The Brazilian economy has been able to sustain a 25.6 per cent increase in jobs between 1986 and 1995. In the same period, the number of economically active members of the Brazilian population rose from 56.8 million to 74.1 million, a similar increase to the number of jobs created, so that the rate of ‘open’ unemployment rose only modestly.²²

In the same period (1986-95) each of the industrialised economies have faced higher rates of unemployment – apart from the United States – with serious social consequences. According to Gonzaga, between 1986 and 1995 the ability of the Brazilian economy to create so many new jobs was due to the poor quality of such jobs, resulting in low productivity and low salaries. The study points to a decrease in net salaries in metropolitan areas and an insignificant increase of 0.6 per cent in formal jobs, although the percentage of jobs (formal and informal sectors) rose by 25.6 per cent in the same period, as already stated.

Low wages have been the norm in Brazilian economic history. In contrast, the CNI figures reveal that the real average wage increased 6.1 per cent between June 1995 and June 1996. A detailed analysis of Ministry of Labour figures supports the inferences made in the Gonzaga paper regarding the new employment profile in Brazil. Using this data the Brazilian newspaper *Folha de São Paulo* calculated the structure of jobs and job losses by salary in Greater São Paulo (see Table 4):

**Table 4**

*Formal Jobs in Greater São Paulo – by salary level*

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Half to 1 salary</td>
<td>43,339</td>
<td>6,908</td>
<td>+ 16%</td>
</tr>
<tr>
<td>1 to 1.5 salary</td>
<td>58,911</td>
<td>8,631</td>
<td>+ 15%</td>
</tr>
<tr>
<td>1.5 to 2 salaries</td>
<td>94,726</td>
<td>29,048</td>
<td>+ 31%</td>
</tr>
<tr>
<td>2 to 3 salaries</td>
<td>530,240</td>
<td>51,455</td>
<td>+ 10%</td>
</tr>
<tr>
<td>3 to 5 salaries</td>
<td>678,881</td>
<td>-45,490</td>
<td>- 7%</td>
</tr>
<tr>
<td>5 salaries</td>
<td>320,008</td>
<td>-38,742</td>
<td>- 12%</td>
</tr>
<tr>
<td>Unknown</td>
<td>192,188</td>
<td>-4,893</td>
<td>- 4%</td>
</tr>
<tr>
<td>Total</td>
<td>2,918,293</td>
<td>-113,082</td>
<td>- 4%</td>
</tr>
</tbody>
</table>


Training – Great Hopes and Worrying Failures

In 1996, the economically active population in Brazil stood at approximately 75 million people. According to IBGE figures, the average level of schooling amongst this population was 5.5 years. According to the DIEESE, 62 per cent of the metalworkers in Guarulhos had not completed a professional course before or during their employment.\(^{23}\) Meanwhile, according to the Plano Nacional de Educação Profissional (PLANFOR), developed by the Ministry of Labour, only 5.5 per cent of the economically active population had access to professional training.

PLANFOR has very ambitious goals. Based on the 1996 figures, the Brazilian Ministry of Labour intended to train 1.5 million workers in 1997. In 1998 the objective is to train 2.5 million with the eventual goal of reaching 15 million Brazilian workers. This figure is equivalent to 20 per cent of the Brazilian workforce.

The Brazilian government has made a major financial investment in PLANFOR. In 1996 it spent R$232 million (US$209 million), in 1997 R$320 million (US$288 million), and the predicted spending for 1998 is R$260 million (US$234 million). Officially, PLANFOR attends to the needs of the long-term unemployed; those who are directly threatened with dismissal by the production re-structuring process; and workers in the informal economic sector.\(^{24}\)

PLANFOR’s projections have been unrealistic. It is funded by the Fundo de Amparo do Trabalhador (paid by workers) and all the training courses have union support. However, the training in which they invest does not always provide appropriate results. The best results have been achieved with metalworkers; according to the Confederação Nacional dos Metalúrgicos (CNM), approximately 50 per cent of the workers retrained by PLANFOR have obtained new positions.

Determining what is the criterion for the term ‘new job’ has been a real problem. The CNM has considered a job in commerce, or any position in the building sector as a ‘new job’ for individuals employed as skilled metalworkers prior to their dismissal. There have been new positions, but in reality only 18 per cent of retrained metalworkers regained formal jobs in the industrial sector with a similar quality job to the one they held before dismissal and retraining.\(^{25}\) Bank unions, having more rigid definitions of what constitutes a ‘new job’, recorded that 16 per cent of workers had obtained a new job after taking the

\(^{23}\) Research from Metalworkers’ Union of Guarulhos, Aruja, Mairipora and Santa Izabel published in O Estado de São Paulo, 2 March 1997.

\(^{24}\) Figures from Plano Nacional de Educação Profissional-1996/97 (Brasilia: Ministério do Trabalho, 1997).

\(^{25}\) Figures from Confederação Nacional dos Metalúrgicos, Programa Integral de Qualificação e Requalificação para o Trabalho (São Paulo: CNM/CUT, 1997).
PLANFOR course.26

In Brazil ‘training’ has been highlighted as a priority for unemployed workers. Indeed, training workers has constituted a huge problem for the Brazilian workforce in all sectors, including those with highly specialised jobs. This situation has been explained first by a low capacity to adapt to new work methods due to very low levels of formal schooling. Secondly, Brazilian institutions undertaking the task of training people have exclusively addressed their aims at preparing a specific number of workers, sometimes according to immediate industry or sector necessities.27 During the past five decades, some of these institutions, such as Serviço Nacional de Aprendizagem Industrial (SENAI), had considerable success with improving the qualifications of the Brazilian workforce, but such efforts have been insufficient to meet national demands. Although the performance of these institutions has been excellent, the results are modest when one considers the necessities of modern industrial development in Brazil.

Worker training began with SENAI, during the first Getulio Vargas government. Law number 6.029, December 1942, which created SENAI, was concerned with industrialisation in the south-east and included the obvious necessity of a ‘school of workers’ in order to ensure that plans for future industrialisation would be realised. Entrepreneurial organisations, such as the São Paulo State Industry Federation (FIESP) and the CNI, were actively involved in the Vargas government decision. Different authors pointed out that SENAI was the most visible part of the emergent industrialist attitude, typical of the early 1940s.28

Bearing in mind SENAI’s origins as a consensus project, involving government and entrepreneurs, it is easy to understand the efficiency of the institution’s performance for many years. This consensus was underpinned by a total integration of industrial targeting and direct administration of SENAI by industry organisations. The pedagogic structures of SENAI did not face problems until the late 1980s. Law number 6.029 had determined that every company had to have a ‘methodical preparation of learning’ and this obligation was fulfilled by SENAI, with industry having to pay through a ‘contribution’ (a percentage based on net company value). This is an important point: SENAI provided exactly what the industry expected from it. The 1942 law asked for a ‘complement’ to the adult worker’s professional training beyond that received

27 Careful research by IPEA showed that the Brazilian educational system had a much lower performance than other countries with the same GNP. The Brazilian workforce institution qualification did not requalify unemployed people, as their efforts have almost exclusively been addressed at those who are already employed, with a few specific exceptions. Amadeo, E., Camargo, J., Barros, R., Urani, A., Mendonça, R., Pero, V. (1995) in Ajuste Estrutural e Flexibilidade do Mercado de Trabalho no Brasil – Perspectivas da Economia Brasileira (Rio de Janeiro: IPEA).
in the workplace. SENAI carried out this objective efficiently from the 1940s until the 1980s.

SENAI’s efficiency has been confirmed by different data. According to Ministry of Labour data collected over 50 years and completed in 1992, SENAI had trained almost 70 per cent of the Brazilian workforce. According to 1996 SEADE figures, SENAI had trained 91.1 per cent of the economically active population in São Paulo.\(^29\) While Brazil had a protected industry with rigorously closed economic frontiers, the SENAI training methods had been both sufficient and efficient. The pedagogic process based on ‘watch, imitate and learn’ guaranteed success for four decades. During these decades the method was improved, but had never been replaced, due to pressure from the industrial sector. Even in the 1970s, when SENAI had attempted a planned modernisation of the educational process (using educational television, for example), the industrial organisations did not offer an alternative.

In the late 1980s, when specific sectors started to demand highly skilled workers, the SENAI approach proved inadequate. The electronic and computer sectors required a workforce with more technological capability. SENAI still used traditional methods to train the ‘modern technological slice’ of the Brazilian industrial workforce. New demands were met using old techniques and the system began to break down.

SENAI continued to train the same number of workers, as demanded by law, regardless of the state of the economic cycle. When employment shifted due to changing realities, the traditional scheme established by the 1942 Law exhibited weaknesses. Controlled by numbers set out in the law, technological training did not expand with the necessary speed to involve more and more components of the workforce. Even within specific segments, this expanded qualification has been curbed. The case of the electronics sector provides the best example. The electronics sector has continuously had unfilled positions due to a lack of skilled candidates to fill them.\(^30\) SENAI as a training institution cannot take the sole ‘blame’ for this discrepancy. The industrial sector has not applied any pressure that would lead to modernisation of worker training. Only when international competition arrived in the early 1990s was the huge discrepancy between the skill levels of workers and international standards finally recognised. The five decades during which occupational training was treated as a question of law resulted in serious damage to the prospects of the Brazilian industrial sector.

However, other ‘alternative routes’ in occupational training have been taken in Brazil. Volkswagen Company, Brazil’s principal car manufacturer, developed the most significant examples of ‘alternative’ training methods. In the late 1980s, obliged under the pressure of the changing productive structure

\(^{29}\) Figures from Pesquisa de Emprego e Desemprego (São Paulo: SEADE, 1996).

\(^{30}\) Figures from Secretaria de Emprego e Relações do Trabalho do Estado de São Paulo, Planilha de Atendimento (São Paulo, 1997).
in the international car-manufacturing sector, Volkswagen researched the real educational profile of its workforce in Brazil. In February 1990 the results were divulged: 63 per cent of the Volkswagen workers (the notorious Brazilian 'aristocracy' of industrial workers) had not completed basic schooling. More seriously, 54 per cent of these workers had only completed four years of basic schooling. The illiteracy rate among Volkswagen workers was not divulged.

Facing the huge challenges of competition in the international market with this workforce profile, the Brazilian car manufacturers invested in a four-year training programme comprising professional training and formal education (basic and secondary levels). In 1994 Volkswagen reduced its workforce from 50,000 to 36,000 and the per-hour productivity increased by 35 per cent. All of the dismissals were carried out with the knowledge of the local union, which recognised the difficulty of workers' adaptability to new production demands.\(^3\)

The local union involved in the Volkswagen case was forward thinking and recognised the need to address the reality of the changing structural process. The educational profile of the Brazilian workforce demonstrated a significant incompatibility with the new demands of industrial restructuring. A special research team, supported by Serviço Social da Indústria (SESI), compiled a statistical education profile of Brazilian workers: only 40 per cent had completed basic schooling. Of even greater concern was data showing that 34 per cent of the Brazilian workforce with a formal job had fallen into the 'functionally illiterate' category. This category refers to people who 'could read basic instructions regarding industrial operation, but had no capacity to perceive or understand what they had just read'.\(^4\)

During the past five years, despite this concerning educational profile, the Brazilian productivity rate has increased continuously. FIESP research showed, for example, that the *Indicador de Atividade Industrial* in 1997 increased by 17 per cent. However, it also showed that jobs in the industrial sector in the state of São Paulo declined by 35 per cent. This is an important point. The Brazilian economy has specific features including the policy of dismissing untrainable workers in order to adapt to new realities, sometimes at a surprisingly rapid rate.

### The Productivity Question and Brazil's Segmented Labour Market

DIEESE research, conducted in 1995 on work conditions among metalworkers in Guarulhos (Greater São Paulo), revealed that 62 per cent of these formal sector employees had never completed any professional course or training. Yet the IBGE Census showed that in 1995 Brazilian industrial productivity had increased 4.1 per cent, following increases of 10.3 per cent in 1994 and 12.4 per

---

32 Figures from *Perfil do Trabalhador da Indústria* (São Paulo: SESI, 1994).
cent in 1993. Thus, despite its unskilled workforce, Brazil appears to have achieved significant increases in productivity rates. However, the reality of the Brazilian productivity rate is more complex.

The high productivity rate in 1993 and 1994 was closely connected to the open economic frontiers policy practised by Brazil since the early 1990s. A detailed study, published in 1995, showed that in 1992 57 per cent of Brazilian companies in the industrial sector worked with a technological lag in terms of the models available on the national market, and 60.25 per cent of companies in the sector had industrial equipment that was, on average, at least one ‘technological generation’ behind. The internationalisation of the Brazilian economy put great pressure on such discrepancies.

In practical terms, the real meaning of the average rise in productivity has lost significance. Facing international competition has caused different reactions in each economic sector. First, economic internationalisation has put different pressure on each sector. Indeed, the different productivity rate increases in each sector show the possibility of making significant profits with this internationalisation. For better or worse, these shifts demonstrate a fundamental acceptance of modernised industrial relations on the part of the employers, and a general acceptance of the new premises of employment on the part of the employees.

This segmented performance constitutes the best indicator of Brazilian industrial activity for each sector. IBGE figures confirm this segmentation, as Table 5 shows:

Table 5 – Productivity Variance in a Sample of Industrial Sectors
(Percentage per year)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>General Industrial Sector</td>
<td>-2.2</td>
<td>10.4</td>
<td>4.7</td>
<td>12.4</td>
<td>10.3</td>
<td>4.1</td>
</tr>
<tr>
<td>Metalwork</td>
<td>-6.1</td>
<td>12.8</td>
<td>16.6</td>
<td>15.4</td>
<td>-1.1</td>
<td>-0.9</td>
</tr>
<tr>
<td>Electronic</td>
<td>5.9</td>
<td>10.6</td>
<td>-2.3</td>
<td>29.1</td>
<td>23.1</td>
<td>9.7</td>
</tr>
<tr>
<td>Pulp and Paper</td>
<td>-1.6</td>
<td>16.0</td>
<td>3.7</td>
<td>6.8</td>
<td>14.3</td>
<td>3.7</td>
</tr>
<tr>
<td>Pharmaceutical</td>
<td>-4.2</td>
<td>0.3</td>
<td>-11.8</td>
<td>11.5</td>
<td>2.7</td>
<td>15.2</td>
</tr>
<tr>
<td>Food</td>
<td>-4.7</td>
<td>3.4</td>
<td>13.4</td>
<td>7.9</td>
<td>8.8</td>
<td>7.1</td>
</tr>
<tr>
<td>Drinks and Refreshments</td>
<td>-1.1</td>
<td>4.2</td>
<td>-14.2</td>
<td>13.3</td>
<td>28.3</td>
<td>10.4</td>
</tr>
<tr>
<td>Textiles</td>
<td>-4.7</td>
<td>3.4</td>
<td>13.4</td>
<td>7.9</td>
<td>11.6</td>
<td>-1.9</td>
</tr>
</tbody>
</table>


The metalwork sector (see Table 5) recorded a negative productivity performance in 1994, after two years of rapid productivity increase. The

---

electronic sector made huge investments and retrained its own workforce in the early 1990s. It recorded an impressive productivity increase after 1992. On the other hand, the productivity rate is a very sensitive ‘thermometer’. A good example of this sensitivity is the pharmaceutical sector. In the late 1980s and continuing into the early 1990s, when prices were controlled, the pharmaceutical sector recorded negative increases in productivity. In 1993, when the controlled price policy was phased out, the sector experienced high increases in its productivity. In 1994, when the same controlled policy returned, the productivity rate dropped again.

The increase in productivity forces us to rethink ‘conventional knowledge’ of the Brazilian economy. A study from Banco Nacional de Desenvolvimento Econômico e Social (BNDES) economists has confirmed that, from the early 1990s, the larger industrial companies have been making the principal contribution to the productivity rate increases. This study disputed the historical argument regarding the importance of small companies in economic improvements. During the past five years the sectors with the highest productivity rates had production concentrated in large industrial companies.34

The IBGE Economic Census of 1985, when the economy was still very closed, showed that the technological spending of Brazilian companies was very low, at just 0.4 per cent of the net company budget. This level of spending was 112 times less than the amount United States companies had spent in the same year. In 1992 this expenditure had improved; in worker training alone, Brazilian companies were spending 0.4 per cent of net revenue, although this represented less than one per cent of the total number of hours worked per year. According to the same criterion, in 1992 the United States spent seven per cent, and France and Germany spent five per cent.35

In 1996 the situation involving technological and training expenditure had a completely different profile. According to CNI research conducted in that year, 36 per cent of Brazilian companies already spent two per cent of net revenue in technological investment. This research showed that 70 per cent of Brazilian companies had a budget plan to reach this expenditure level in technological investment within four years.36

The CNI research did not release results for different sectors, although it is widely assumed that there has been a concentration of this kind of investment in well-defined activities. Other research conducted in 1992 (mentioned above), using different methodology involving 11 different sectors of industry, showed two choices. First, firms can choose different suppliers in order to change variables such as input prices and, secondly, firms can develop common

programmes of research and development with potential suppliers using co-
operative strategies to develop goods and production processes. Although a
significant percentage of Brazilian companies favoured the second option, the
research confirmed that 52 per cent of the food industry actually practised the
first choice. The same results were true for 47 per cent of the textile industry
and 48 per cent of the dressmakers’ industry. Obviously, 100 per cent of the
Brazilian car manufacturers had officially developed only the first choice, while
46 per cent of the components industry had chosen to carry out common
programmes of research and development with different sources. 37

The sectoral differences in the productivity rate – a new feature of the
Brazilian economy – have had close correlation with the choices made in the
early 1990s. In reality, there have been specific segments in the same industrial
sector which have proved to be more adapted to the new economic conditions
of competitiveness. It is these segmented sectors which have demonstrated the best
results in the Brazilian economy. This proves to be at variance sometimes, and
indeed almost incompatible, with the conventional economic wisdom. Research
by the Instituto Nacional de Metrologia, Normalização e Qualidade Industrial
(INMETRO) has confirmed the impressive increase in ISO 9000 quality
certificate concessions. 38 Not only has there been an increase in ISO 9000
certificates, from 18 in 1990 to 2,144 in 1996, but these have also been
concentrated in a number of production sectors as shown in Table 6:

<table>
<thead>
<tr>
<th>Sector</th>
<th>Percentage in 1996</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electronics</td>
<td>20</td>
</tr>
<tr>
<td>Chemicals</td>
<td>14</td>
</tr>
<tr>
<td>Metalwork</td>
<td>13</td>
</tr>
<tr>
<td>Machinery</td>
<td>9</td>
</tr>
<tr>
<td>Transport Equipment</td>
<td>8</td>
</tr>
<tr>
<td>Building Sector</td>
<td>7</td>
</tr>
<tr>
<td>Mineral Products</td>
<td>5</td>
</tr>
<tr>
<td>Rubber and Plastic</td>
<td>4</td>
</tr>
<tr>
<td>Auto Products</td>
<td>4</td>
</tr>
<tr>
<td>Others</td>
<td>16</td>
</tr>
</tbody>
</table>

Source: Associação Brasileira de Normas Técnicas / INMETRO

INMETRO also investigated the industrial relations profile among
gcompanies with ISO 9000 recognition. In this sample 76 per cent of the

(Brasilia: IPEA).
38 ISO 9000 is a standard for quality control in the industrial production system, meaning that a
specific firm has achieved the level of quality demanded at an international level.
companies had developed retraining programmes for their own workforce; 42 per cent had developed different formal education programmes for employees and 45 per cent had programmes to distribute productivity gains. This shows that the modernisation of Brazilian industry has not affected all companies in the same way, with only a relatively small number of companies adopting the most advanced techniques.

Conclusions

As with other features of the Brazilian economy, the labour market has two dimensions, the first originating with the law and the second being real practice. Brazil had virtually completed the flexibilisation of the laws that had traditionally protected the labour market by the early 1990s. Obviously, the free market exclusively defined this ‘disguised flexibilisation’. This condition has had serious consequences. The state has almost lost control of the labour market situation. In reality, it is in the Brazilian state’s best interest to turn a blind eye to issues of labour market control. The real ‘solution’ to the flexibility problem – considering the geographical and economic reality in Brazil – has arisen from the market, as with other industrialised countries. When roughly 50 per cent of the economically active population has worked without ‘official connections’, this is a logical outcome. Furthermore, within the other 50 per cent of the economically active population, special kinds of ‘flexibility’ have been practised, as demonstrated by the many workers accepting more work with the same salary.

On the other hand, the new concept of employment, with a clear employee commitment to productivity and quality levels, has brought about impressive changes in the Brazilian labour market. The pressure to move the industrialisation process to inner Brazil – officially attempted without success for the past forty years – was slowly yet efficiently accomplished through this new employment concept. There has undoubtedly been pressure to produce low cost goods at an increased scale of output. In addition, there has also been a push for lower salaries. This has not been an isolated process. The privatisation programme has made major changes in the Brazilian labour market due to the transformation of huge sectors of the Brazilian economy, traditionally connected (with special protection) to former state companies. Privatisation will continue to cause unemployment, until such changes are complete.

Trade liberalisation will bring benefits in the long term, while in the short term it will continue to reduce jobs. Commercial openness demands more on-the-job training and redistribution of jobs. This will probably be the most difficult part of this long-term change. As companies have had a policy of very low investment in workforce training, this process will probably be slow. Furthermore, company training is a high-risk investment due to a high labour turnover rate in Brazil. High labour turnover rate, the principal ‘thermometer’ of low quality jobs, has long been a reality of the Brazilian economy.
There have been many mistakes made while trying to understand the Brazilian economy. Certain sectors of the economy have performed very differently from the economy as a whole. These sectors have forged their own rules and developed alternative working practices. Old visions of the economy have clashed with the new economic reality. The person who attempts to look for the whole will probably see only the wood without seeing the trees. That is why it is essential to have a full understanding of the different sectors of the Brazilian economy in order to see how change and modernisation is introduced into the system. This paper should be seen as a step in this direction.