1. Professionals' capitalism and democracy

Luiz Carlos Bresser-Pereira

1. INTRODUCTION

The twentieth century will be known in the future for many major changes: it was the century of technological progress, the century of organizations rather than of family units of production and the century in which the number of bureaucrats increased so much as to merit being identified as social class – the professional middle class. In connection with these changes, it was the century when knowledge eventually became the decisive factor of production, and the control of technological, organizational, and communicative knowledge turned strategic. Yet it was also the century of democracy, which represents a check to this new power, while at the same time it is conditioned by it.

While changes occurred in the social and political spheres, economies experienced enormous growth and became much more complex. In this process, markets assumed a major role in coordinating economies – by allocating factors of production employed by business enterprises – but, obviously, the coordination of the whole system surpassed by far, their possibilities. At the macro political level, the role of the state and of the institutional or legal system which it creates and enforces increased enormously. At the level of civil society (of politically organized society), corporative organizations, and, after that, social accountability organizations increased in number and influence, acting as control mechanisms of governments. Concurrently, at the economic realm, large business corporations, and all other types of large organizations, became dominant everywhere. Firms required entrepreneurs, organizations demanded managers or professionals covering an increasing larger spectrum of specialties. Organizations continue to require entrepreneurial or innovative action, but entrepreneurship became increasingly collective rather than individual (on this point, see Sophie Boutillier's contribution, Chapter 3). Within all organizations, beginning with the state apparatus and including the social accountability non-profit organizations, the large business enterprises, and the large non-profit service organizations, the demands of technical, administrative and communicative knowledge also increased dramatically – and the power of managers or professionals increased proportionally.

In the contemporary world, institutions, organizations and networks are much more complex, in so far as they embody increasingly sophisticated scientific and technological progress, as they deal with large organizations, and as they regulate dense networks. In 1967 Galbraith observed that technical knowledge had become the strategic factor of production. A little later, when I wrote my basic essay on the emergence of technobureaucracy or the professional middle class, I added to technical, organizational or administrative knowledge (Bresser-Pereira, 1972); now I am including a third element, communicative knowledge, to stress the new role played by information technology in shaping what Manuel Castells (1996) called, and analysed so acutely, the 'network society'. I will call these three forms of knowledge 'operational knowledge', in so far as they are required to render operational, the modern and complex societies in which we live.

Galbraith's claim that capital was ceasing to be the strategic factor of production, being gradually replaced by technological knowledge, appeared in his classical book *The New Industrial State* (1967 [1979]). Today there is little doubt that his prediction was correct. We live in professionals' capitalism or knowledge capitalism – in a social system which remains capitalist but is increasingly controlled by knowledge rather than by capital. The central characteristics of the capitalist system – market coordination, profit as the basic motive, and capital accumulation with embodied technical progress as the basic means to achieve results – remain valid, but knowledge has become more strategic than the ownership of capital. In the production process, capital goods remain a central factor of production and their ownership a major source of revenue and power, but today they are relatively less scarce than knowledge, than the capacity of dominating technology, of managing modern organizations, and of communicating through the many media. In the political domain, knowledge has always been strategic, but knowledge becoming strategic in the economic realm is a major new historical fact that is necessarily affecting democracy.

The major social and more obvious consequence of this change was the rise of the professional middle class, or of a technobureaucratic class, which, today, shares income, wealth, in the private as well as in the public state and non-state organizations, with the capitalist class, while competing for influence or power. The major political consequence is that the emergence of this new class favoured the consolidation of democracy. Democracy is only consolidated when the respective society counts with a large 'new' professional middle class, as well as an 'old' middle class of owners of small and medium-size businesses. For some time, however, analysts resisted this idea of the emergence of a new social class. First, because the professional middle class, which includes politicians and intellectuals, does not like to be called a new social class, and 'hides' itself; second, because to accept the idea of a new emerging social class could entail a loss of power for the capitalist class – something that the left in particular was not prepared to accept, unless such change pointed in the direction of socialism; and, third, because the theory of a new social class, which was rising in the capitalist nations and had become dominant in the Soviet Union, contradicted the standard analysis of social scientists about political power.

Yet the increase of the new middle class was so extraordinary that it became impossible not to acknowledge its existence and new relevance. Thus, I will start from the assumption that operational knowledge is the new strategic factor of production, and that the professional middle class shares income and disputes power with the capitalist class. What are the consequences of these new realities? Are we entitled to speak of a professionals' capitalism, or a knowledge capitalism? Can we have a capitalism in which power and new income may derive principally from knowledge and not from capital? In the affirmative case, does this means that the professional middle class has 'won' its fight for power, or that the capitalist class still holds not only wealth but political power? Is the concept of capital still the same, or, given the existence of a new relation of production that I call 'organization', should it be revised?[1] Can democracy become an effective 'countervailing force', in Galbraith's sense of this expression? How to profit from the advantages deriving from knowledge becoming the strategic factor of production without incurring in its disadvantages? In this chapter, I will suggest some answers to these questions.

2. THE PROFESSIONAL AND THE ORGANIZATION

Whenever possible, conventional social science avoids the use of the word 'capitalism', preferring more general expressions such as market society or market economy. Nevertheless, capitalism is a strong word and cannot be avoided. Capitalism has been receiving many adjectives as it changes through time. Liberal or classical capitalism, monopolist capitalism, organized capitalism, industrial capitalism, informational capitalism, global capitalism, each one stressing a given aspect. Or, instead of adjectives, some expressions try to suggest that capitalism had been surpassed, given its own success. We would now live in post-capitalist societies, or in post-industrial societies, or in the global society. The fact that operational knowledge is gradually replacing capital as the strategic factor of production seems to corroborate the later approach. Yet, although relevant, the strategic factor variable alone does not define the social and economic natures of the capitalist system.

Capitalism does not need necessarily to be capitalism of the bourgeoisie, it may well be capitalism of the professional or, more directly, knowledge capitalism.

Capitalism was originally defined by Marx as the economic and social system where the means of production are historically separated from workers, giving rise to a capitalist class or bourgeoisie, which holds capital (the private ownership of the means of production), and to a salaried class of workers or proletarians. Capitalists are motivated by profit or the plus value, which is achieved in the market through an exchange of equivalent values. In order to make profits, entrepreneurs accumulate capital and innovate, incorporating technical progress into the process of production, and hire workers who sell their labour in the market as any other merchandise. Defined in these general terms, twenty-first century societies continue to be capitalist, despite the enormous change that they have experienced. The economy continues to be essentially coordinated by market competition. The profit motive remains central, and capital accumulation with incorporation of technical progress remains the means by excellence to achieve profits.

Yet as organizations replaced family firms as the basic unit of production, and as operational knowledge became the new strategic factor of production, the control of production changed hands. Classical capitalism was obviously capital's capitalism; professionals' capitalism, however, is when capital and organization get associated. As Berle and Means (1932 [1950]) remarked long ago, a major separation of control from the ownership of corporations took place in modern capitalism. Everywhere managers or professionals replaced stockholders or the capitalists in running productive organizations. I have already used 'technobureaucrat' instead of professional but it is a long word with negative connotations. 'Bureaucrat' would be an alternative, but it is often limited to the public sector. Despite its shortcomings, I would rather use the expression 'professional' than 'manager' as the modern expression for bureaucrat including private bureaucrats. The expression 'manager' would also be adequate in so far as the manager directly controls organizations. But our social actor may be a professional who dominates technical problems, or who operates within communication networks. If he works for business organizations, he will be a private manager or professional; if, directly for the state or for non-profit organizations, he will be a public professional or public officer – public professional includes the ones working for non-profit organizations, while the public officers work for the state as elected politicians, or non-elected civil servants. Intellectuals and scientists are also within the broad category of professionals. Professionals, as the other social classes, are organized in strata (Bresser-Pereira 1981b): although I speak of a professional middle class, because the great majority of the professionals belong to the middle class, there are also highly paid executives, who are more properly part of the upper strata, as well as low-level bureaucrats who are more properly located in the lower class. The professional takes decisions, defines institutions, organizes production, creates networks, develops new knowledge, propagates or challenges values and beliefs, having as legitimacy not tradition, nor capital, but knowledge.

This distinction between capitalists and professionals may always be questioned with the argument that from the modern capitalist entrepreneur is required not only capital and the capacity to assume risks, but also the knowledge from which derives innovation. Yet the ultimate legitimacy of the capitalist derives from capital, not from knowledge. It is also true that Schumpeter's classical definition of the entrepreneur says that 'capital' is not the ownership of the means of production, but credit – the capacity to finance innovation. But in offering this definition of entrepreneur, Schumpeter (1911) was anticipating history, he was suggesting the type of individual entrepreneurship that, together with the collective entrepreneurship in large organizations, would be the typical professionals' capitalism.[2] It is true that, as an end result of his entrepreneurship, the professional, the knowledge person, will also become a capitalist. But this does not change the basic source from which he achieved wealth.

In classical capitalism we had just two social classes, if we ignore the aristocracy or the land owners, whose role faded out with the rise of capitalism. In modern societies we have three social classes – the capitalist class, the professional middle class, and the working class. To have two ruling social classes makes no sense if one adopts an orthodox Marxist approach. Not being a Marxist, nevertheless, in my previous writings on this subject I offered a solution to the problem. First, I contrasted 'pure' capitalism to a 'pure' statist or technobureaucratic mode of production, which would have 'organization' as the specific form of property. Second, being probably more faithful to Marx than official Marxists, I defined modern capitalism as a mixed social system, as a social formation which was predominantly capitalist but secondarily technobureaucratic (Bresser-Pereira 1977, 1981a). In the statist mode of production capital ceases to exist, to the extent that private ownership of the means of production disappears, capital being replaced by organization, i.e., by the collective control of bureaucratic organizations by the professional middle class. They do not hold 'legal' ownership over the business enterprise and all other forms of organization, but 'effective' ownership. While in capitalism, property is private and individual, in statism it is collective. While in capitalism each capitalist either owns directly the means of production, or a proportional part of it in the form of stocks, the manager or professional cannot say that he owns a business enterprise or even a given part of it. He 'owns' the bureaucratic organization to the extent that he occupies an executive or staff position in the organizational hierarchy, he participates in the management of the organization, and often uses its resources to his own benefit.

In professionals' capitalism, top executives in the state and in the large business enterprises are able to define their own remuneration. In business enterprises, theoretically the board of directors does that, but often these boards are controlled by managers rather than by stockholders. In the state, senior public officers, elected and non-elected, often have a similar power, but their pay is considerably smaller. The fact that managers do not hold legal ownership but, instead, de facto collective ownership of the organization obviously reduces their capacity to fully define their revenue. They constantly have to justify their actions, or to explain their remuneration in market terms. Whereas the capitalist is free to make use of their property for their own benefit and that of their family, even the nomenclature in the predominately state-controlled social formations such as the Soviet Union had definite limitations to their attempts to appropriate economic surplus. Professionals' property is not inherited, while capitalist and pre-capitalist property is. The new professional middle class has to adopt various strategies to transmit its class positions to its sons and daughters, while this process is relatively automatic in the case of the capitalist and principally of the aristocratic classes. This means that organizational ownership is less defined and less authoritative than capitalist ownership. It means that the organization is a relation of production which offers less stability to its proprietors than capital does. And it explains why social mobility tends to be higher in professional's capitalism than in liberal capitalism.

In professionals' capitalism, the meritocratic 'ideal', which was the dream of a certain kind of naïve American liberalism, turned into a not so ideal reality.[3] Pay within the organization is contingent upon the relatively unstable position held by each individual. The position, in turn, derives from the monopoly on technical, organizational, and communicative knowledge that the professional has or purports to have. It originates in the bureaucrat's real or assumed technical and scientific knowledge, on his or her ability to manage bureaucratic organizations, and on their capacity to create networks and communicate values and ideas. In terms of social justice, there is a meritocratic improvement – but such improvement is far from being ideal given the fact that the pay of top executives has become extremely high, and income does not get even but often concentrates. Merit and organizational power have become so interrelated that it becomes difficult to know which criterion is prevalent.

Yet, despite all these changes, the system remains capitalist in so far as it is a market system, where profit is the motivation, the rate of profit or the discounted cash flow return on investment is the criterion of success, and capital accumulation with incorporation of technical progress is the means to achieve profits. Peter Drucker (1993, p. 8), who coined the expression 'knowledge society', insists that the era of capitalism is over and that the new society is a post-capitalist society. Repeating Galbraith, but using a new expression, he says that 'the means of production is no longer capital, or natural resources (the economists' "land"), nor "labor". It is and will be knowledge. ... Value will be created by productivity and innovation.' He is right in stressing the new role of knowledge, but wrong in not understanding that the essential and surprising characteristic of contemporary capitalism is that it ceased to be capitalists' capitalism to become professionals' capitalism. Power and privilege, that in aristocratic societies was assigned according to blood and military force, and in liberal capitalism, allocated according to wealth and entrepreneurship, is today increasingly distributed according to knowledge. Wealth and principally entrepreneurship, continue to have major roles, but today the latter already depends more on knowledge than on the ownership of physical capital. Entrepreneurship always depended on both factors, besides the basic one – the innovative character and need-achievement orientation of the entrepreneur – but today it is increasingly improbable that people not endowed with technical, organizational and communicative knowledge will become major entrepreneurs. The typical capitalist entrepreneur is either the young man or woman who gets out of the university with a bright idea, or the experienced manager of a large business company who starts his own business. Summing up, the social system remains capitalist, but capitalism is professional or knowledge capitalism.

3. THE CONCEPT OF CAPITAL

The classical definition of capitalist action, which defined the commercial revolution, was capital accumulation. With the industrial revolution, capital accumulation with incorporation of technical progress became the defining characteristic of the economic system. Today, these two activities remain crucial, and the second one – technical progress – is also the essential part of knowledge capitalism, but a third major element is included: the expansion of the bureaucratic organizations and of the networks through which they operate. If the capitalist accumulates capital, the professional middle class accumulates organizations and networks. The objective is to expand the bureaucratic organization, to create new bureaucratic positions, to accumulate organizational power which depends on the number and character of the subordinated positions in the hierarchical organization, or on the nodes in the personal and organizational networks. The professional, in contrast to the capitalist, is not so much concerned in becoming rich, but in moving up higher in the organizational hierarchy, and in expanding it.

In order to reach his or her goals, the knowledge person must bring about greater efficiency or productivity to their organization. This is the basic criterion which legitimates their position. This is how he or she will be judged by their superiors, their peers and their subordinates. The legitimacy of the professional middle class depends on the real or presumed ability to continually increase productivity as well as the monopoly it holds over technical, organizational and communicative skill. In a world increasingly geared to economic development, where workers' and professionals' remuneration depends upon the overall productivity of the economy, those who demonstrate ability to administer bureaucratic organizations and networks will be in power and will control a substantial share of the national income.

Thus, organization is now a central factor in capitalist societies, side by side with capital. In modern societies the control of organization is as important as control of capital. Power and income depend on the control of capital and of organization, and operational knowledge is the major tool toward both. I am calling this new form, capitalism assumed, knowledge capitalism or professionals' capitalism, but I could as well call it organizational capitalism.

In this sea of change to which the capitalist system is being subjected, the concept of capital itself has changed, and also the form of measuring capital changed. Capital, obviously, should not be confused with the means of production, or with 'capital goods'. Capital is the property of the means of production. Within this broad definition, however, the concept of capital has been changing through time. For the first classical economists, capital was circulating capital, it was essentially the capacity to hire workers by paying them before the result of their labour could be sold in the market. For Marx, as well as for neoclassical and Keynesian economists, who lived in a time where fixed capital had become the dominating factor, while workers could increasingly dispense with having their wages pre-paid, capital was principally the ownership of plant and equipment. In recent times, when software prevails over hardware, or when operational knowledge becomes the strategic factor of production displacing capital goods, capital is the capacity to derive profits from the command organizations and the knowledge embodied in them. The curious and significant aspect of this definition of capital is that it includes the concept of organization. Capital is only really capital when its owners are also 'owners' or able to control the organization. Or, organization is not only the bureaucratic organization, it is also the collective ownership of the means of production by professionals. Organization is for the professional what capital is for the capitalist.

Observe that when Galbraith said that technical knowledge was replacing capital as the strategic factor of production, he was referring to the object of the capital ownership, not to capital itself. He was not defining capital as the ownership of the means of production, but adopting the more usual meaning of the word – the meaning that identifies capital with the means of production, or with physical capital.

Concomitantly with the transformation of the concept of capital into the capacity of organizations generating profits or positive cash-flows, the form of measuring capital also changed. I am not referring to the complex and inconclusive discussion of the 1960s between the two Cambridges on the value of capital. Economics, in such debates, gets near metaphysics, an approach that does not fit my more pragmatic concerns. I refer to the financial value of capital; to the value of business enterprises. In the times of industrial capitalism, up to the mid-twentieth century, the capital of a business enterprise was measured by its net worth as it was identified in the balance sheet. Some corrections could be made, the value of intangible assets could be considered, the accounting valuation of given capital goods could be adjusted, but, eventually, the value of the enterprise was the sum of total assets less liabilities. While physical capital was the strategic factor of production, measuring the value of a business enterprise by its accountable net worth or by its cash flow return on investment did not vary much. Both measures were relatively equivalent, in so far as one could assume that in normal conditions, and given the tendency to equalization of profit rates (probably, together with the law of supply and demand, the two foundations of economics, independently of the school of thought), the outcome would be approximately the same.

Today, such a view is long forgotten, and the value of an enterprise is given by the discounted value of its cash flow. No serious evaluator will consider the old system. What is behind such change? Is it just an improvement in methods of analysis, as non-historical economics assumes, or is there some historical new fact that prompted such methodological change? The relation of this change in the form of measuring capital to Galbraith's new strategic factor of production is quite obvious, and twofold. First, knowledge embodied in the organization's personnel, in software, and in the organization itself is today the more important asset of many corporations, and an important asset for all. Thus, it makes no sense to measure the value of a company by its net worth. Second, after operational knowledge became strategic, financial market analysts verify every day that the value of a corporation varies dramatically according to the quality of its management. A new chief executive officer, a more competent, or an incompetent group of executives running a business enterprise may change its cash flow and profits dramatically in a relatively short period. In this circumstance, the old net worth concept stops making sense, while the cash flow measure of the value of capital becomes the only rational possibility. Thus, in so far as the cash flow of a corporation depends heavily on the quality of its top management, the value of capital depends on the technical, organizational and communicative knowledge that this management controls.

This explains why top management sees its income and power increase every day. It also explains why stockholders' influence is being systematically reduced. It also perversely explains why abuse and corruption, particularly in the form of fake accounting statements, as happened with Enron, became so common in contemporary professionals' capitalism, leading Galbraith to speak about 'the economics of innocent fraud' – the title of his last book (2004). The extraordinary remuneration of top executives, in the form of bonus and stock options, depends on the performance of the executive. Thus, to forge good results is a temptation which many are unable to resist. This strategic role of top management, coupled with a still limited supply of managers or, more broadly, professionals, despite the enormous increase of graduate courses in business administration and correlated areas, and the striking acceleration of technical progress embodied in the digital information technology, also explain the concentration of income that characterizes contemporary capitalist economies since the mid-1970s. (This issue of the managers' remuneration is also studied by P. Petit, Chapter 2 and by L. Mampaey and Claude Serfati in the case of armaments CEOs, Chapter 15.)

Besides changing the way of evaluating capital, knowledge capitalism suggested the definition of a new type of 'capital' – human capital. The two neoclassical economists who formulated this theory (Schultz 1961, 1980; Becker 1962, 1993), assured themselves the Nobel Prize in Economics. And they merited it, because, instead of just using the hypothetical-deductive method, they acknowledged the existence of a new historical fact: that knowledge had become similar to physical capital, and that the investment in education is how individuals 'accumulate' such an asset and from it derive earnings or returns. What they did not stress was that the education of many individuals, the generalization of education to a whole society, brings positives externalities, bringing up spillovers and crossovers that open room for innovation and increase in efficiency at a social level, in such a way that the total human capital created is greater than the sum of the capitals accumulated by each individual.

4. DEMOCRACY AS A COUNTERVAILING POWER

In the preceding sections we verified that, within organizations, the rise to power and prestige of men and women endowed with strategic operational knowledge had major economic consequences, including a change in the concept and measurement of capital. Yet the political consequences are not so clear. Did technobureaucrats lose or gain power in relation to capitalists? Did the people, or the collective of citizens, lose or gain power in relation to capitalists? In relation to capitalists, the professional middle class certainly gained power, but it is far from having achieved more political power than capitalists. This only happened in the statist economic system, but we know that this has been a temporary outcome. In knowledge capitalism, the professional middle class is basically associated to the capitalist one, as the bourgeoisie was, for centuries, associated to the aristocracy. But it is obvious that the capitalist class fears the rise of the professional middle class, particularly when this happens at the level of the state apparatus, of state-owned organizations, and of non-profit organizations. The neo-liberal ideology that rose in the 1970s in the developed capitalist countries as a reaction to the fall in the rate of profit and of the rate of growth of GDP that took place in this decade, was not directed to reducing workers' direct and indirect wages: it aimed also to reduce the professional middle class's salaries and political influence. This ideology, which counted with the active cooperation of organic intellectuals – that is, the intellectuals who support the ideas and actions of the representatives of public and private powers (Gramsci 1934 [1971]) – and of other professional middle class representatives (what shows that this class is far from being united), was successful in achieving its objective, but this is just a chapter in a long-term process of conflict and cooperation between the two social classes.

Yet, in the twentieth century, with democracy becoming the dominant political regime, the capitalist as well as the professional middle class lost political power, while politicians and, to a certain extent, citizens that they represent, gained it. Politicians, however, are essentially professionals, elected officials receiving salaries from the state. Thus, they mostly belong to the professional middle class. But, in contrast to non-elected civil servants, they depend on citizens, on voters, to achieve political power. In the absolute state, by serving as staff of princes or monarchs, patrimonial bureaucrats had more power than in the nineteenth century, when their successors, the professional civil servants, collaborated with liberal politicians. Democracy in the twentieth century implied an increasing demand for accountability from elected and non-elected public officers, involving a reduction of the political power of bureaucrats, but increase in the power of politicians. Although politicians divided themselves between right and left, the former representing principally the interests of capital, the later, of knowledge, the capitalist class always regards the political class suspiciously, and the charge of populism is always ready.[4]

The increase in size and complexity of the state organization made their operational knowledge strategic, and increased their political power. The creation of autonomous regulatory and executive agencies, and the rise of public management reform after the 1980s reflected this new reality. But, at the same time, as I stress in a recent book (Bresser-Pereira 2004), this augmented autonomy required from senior civil servants an increased accountability and gave rise to a myriad of social accountability organizations which can only flourish in a democratic environment. While it is clear that top executives of private organizations saw their power and prestige skyrocket in the twentieth century with the transformation of knowledge into the strategic factor of production, with the parallel rise of democracy it is difficult to say if, eventually, senior civil servants will see their power and influence increase. It certainly increased within the state apparatus and the public non-state organizations, but it is doubtful that the same happened in political terms – that they became more influential in policymaking – in so far that democratic control over them by internal accountability mechanisms, by the media, and by social accountability organizations does not cease to augment. In comparison, today politicians have more power than they had in the past, but this power does not originate solely in the fact that the knowledge requirements for them are higher than in the past (this is also true for all other professions). It derives principally from their capacity to play the democratic game. Politicians, as with senior civil servants, are also increasingly made accountable through democratic mechanisms, but, unlike regular civil servants, their power's legitimacy comes from elections and the continuous support of public opinion. Using Galbraith's concept, democracy acted as a countervailing power to the power of professionals and capitalists – more, however, as a countervailing power to capitalists' power, because politicians are not typical professionals but are a sort of professional.

This is a second instance in this chapter, where we observe a lack of 'correspondence' between two historical variables which presumably should be consistent. First we saw that capitalism is turning into a social system which is not primarily controlled by capitalists but by professionals. Now we see that knowledge people may see their power increase within business enterprises and other organizations, but possibly decrease in the political realm. Why? Because the twentieth century, besides been the century of organization, was also the century of democracy. Because it was only in that century that democracy became the preferred regime of philosophers and politicians. Because only in the twentieth century, first, the more advanced societies, and, later, a large number of developing ones, became effectively democratic.

The historical new fact that prompted such change was the capitalist revolution which changed the form of economic surplus appropriation from the violent forms of pre-capitalist times to profit achieved in the market. From this moment the new ruling class ceased to impose an absolute veto on democracy. But, after this revolution, a century was necessary – the liberal nineteenth century – to persuade capitalists that universal suffrage would not entail the expropriation of the rich by the poor.[5]

Given the rise of democracy, this second 'inconsistency' is not so surprising. The classical correspondence between the economic and the political spheres, which Marx so acutely detected in the nineteenth century, and that is implicit in most non-Marxist contemporary social thought, lost part of its validity. The strategic factor of production is a source of power, but principally of 'direct' power – the power originated in the production process. Marxism established an almost direct relation between the control of the strategic factor of production and political power. In pre-capitalist societies it was the land, in capitalist ones, the capital. Yet, this relation was never so straightforward. Land was a source of power, but it was also the command of military power. In classical capitalism, the control of capital was the key to political power, but it is a simplification to believe that government officers were merely their representatives. In knowledge capitalism, all sort of professionals gained power and influence, but the rise of democracy imposed limits to their discretionary power. The democratic revolution involved the autonomy of politics in relation to the economy, and of political power in relation to the control of the strategic factor of production. Economic interests and the ownership of capital and knowledge continue to play a major political role, but the relative autonomy of the political realm is a new and auspicious fact. It suggests that economic and political developments are complementary but increasingly independent phenomena.

5. ALLIANCE BETWEEN PROFESSIONALS AND CAPITALISTS

Despite the advance of democracy, we should not easily dismiss the control of knowledge as a source of power. In some areas, power derives essentially from it. And it becomes particularly dangerous when professionals get associated to capitalists. Take, for instance, macroeconomic policy, which plays a strategic role in all contemporary societies since economic stability and also growth depend heavily on it. Although such policy affects everybody in a modern society, the financial sector has today a privileged role in its determination. In principle, this power is the prerogative of central banks and finance ministries, but, in practical terms, private financial institutions have a decisive say on the matter. Why? Is it because Hilferding's 'financial capital' is all powerful? – clearly not. According to Hilferding (1910 [1963]), 'financial capital' was the outcome of the merger of banking with industrial capital under the command of the former. In the beginning of the twentieth century this phenomenon was taking place in Germany, but it was not reproduced in the other countries, and even in Germany it came to a halt. Is it because commercial banks have a strategic role in modern societies, where money has lost its classical connection with physical wealth, and became a convention, fully depending on the credit that each national currency disposes? This is a better answer, but not the whole story. Financial institutions also have substantial capacity to influence macroeconomic policy since they have greater knowledge on the subject than other sectors of the economy, as they hire a large number of competent macroeconomists. They do that because macroeconomic policy, the decisions the government takes on the interest rate, exchange rate, money supply, and fiscal policy are the bread and butter of financial institutions. To competently invest their own resources or their clients' assets they must make predictions every day on such issues. If we compare the number of macroeconomists able to express opinions on macroeconomic policy hired by the financial sector with other sectors of the economy, including government, we will see that conventional macroeconomic knowledge is concentrated in it. It is often a biased knowledge, organized according to the interests of rentiers and the financial sector, but it is effective knowledge. Thus, it is not difficult to understand the disproportional power that the financial sector has on macroeconomic matters – disproportional to the total capital that business enterprises in this sector hold, but proportional to their specialized and often biased knowledge.

This example illustrates not only how political power can originate in knowledge, but also shows how this power can be increased when capital and knowledge, capitalists and professionals, are associated. Conservative groups within each nation-state engage in such an association to exert power in terms of control of public policy. Since they cannot exert direct domination based on capital, they use knowledge, that they rapidly label 'scientific reasoning', to legitimize their views and interests. Such knowledge is ideological, but it is often viewed as more 'reasonable' than the critical views coming from the left or the progressive sectors of society, because it is the outcome of a sophisticated theorizing by economists who are part of the domination system. This knowledge often privileges rentiers and the financial industry at the cost of the real sectors of the economy, but since the critiques coming from the opposing groups are frequently deprived of the necessary technical knowledge, or originate in a competent but very small knowledge group, the probability that the financial sector's views prevail is great. In Brazil, where macroeconomic policy is particularly strategic in so far as the country has faced chronic macroeconomic instability since 1980, the power of the financial sector is particularly great. And the policy mistakes made with its active support are impressive. Between 1995 and 1998, for instance, it supported an over-valued exchange rate which proved disastrous to the

Brazilian economy. Presently, it supports the adoption by the central bank of an extremely high basic interest rate, which only benefits rentiers.

In principle, a democratic regime should be able to control the central banks and other regulatory agencies whose decisions have powerful consequences over society and the economy. Up to the present, however, a democratic process has not prevailed in these matters because they are both 'highly technical' and dangerously strategic. Thus, politicians and the voters they represent abdicate the control over such agencies in the name of the lack of the necessary specialized knowledge. In fact, these matters are often less complex than it is said. Interest and exchange rates policy may have very sophisticated mathematical models behind, but often simple and pragmatic reasoning proves to be more consistent with economic stability and growth. Regulatory agencies, including central banks, are often captured by the respective regulated industry, but their 'independence' from politicians will be kept while knowledge remains concentrated in the regulated sector. Politicians themselves feel more secure by granting such independence when the agency is really as strategic as central banks are. The modern corporation, whose central role in contemporary society, Galbraith so acutely discussed, is essentially the epitome of the association of capital with organization, of capitalists with professionals, and probably for that reason it is so strong. In general, private professionals tend to be closely associated to capitalists around the large companies. That is why, in political terms, public professionals are more noteworthy. They also associate themselves with capitalists, but to a lesser extent. They have an autonomy that private professionals lack. Their technocratic ideology based on the claim of a superior efficiency is more consistent than that of private professionals. On the other hand, the fact that they work directly for the state organization allows them a more straightforward public ethos. They work for the public interest, or they are supposed to do so.

Thus, when we say that we have three basic social classes in modern capitalism, and that they establish among themselves association and conflict relations, we refer to the capitalist class, the working class and principally the public professional class. The latter acts as a kind of intermediary between the other two classes, while at the same time they have their own interests very clear. While the private professional middle class is always associated with the capitalist one, the public professional middle class associates itself with one or other, or with both, in various ways. After the Second World War, public professionals primarily associated themselves with works in building the welfare state. Thus, in the 1970s, when the profit rate and the rate of economic growth fell, the neo-liberal response aiming at reestablishing both rates was aimed against this association. The objective was to reduce the size of the state, professionals' salaries and workers' wages. In the 1930s, Keynes realized that there was a less conflicting alternative – to expand the economy through fiscal policy – but such alternative was not effectively available in the 1970s, given that, unlike the 1930s, the nation-states were facing serious fiscal crisis. Keynes's macroeconomics is a general advance in economic thought, but involved policies to restore the rate of profit and employment which depend on healthy public sector's finances.

6. IDEOLOGIES

While there is a capitalist ideology, based on economic liberalism and the entrepreneurial role of the capitalist, there is a professionals' ideology based on instrumental rationality and on the claim of superior efficiency of bureaucratic organizations, or of the administrative coordination of the economic system. On certain occasions these ideologies, respectively supported by neoclassical economics and the bureaucratic or statist theory of the planned economy, are at odds. They have never been more in conflict than during the Cold War, when liberal capitalism confronted the Soviet Union's bureaucratism or statism. When both groups and their respective ideologies are strategically associated, as happened in the developed world during the 1970s, when capital and knowledge come together, we may have, in the ascending phase of the long economic wave, a strong process of economic growth that will interest all. Yet, in the declining one, a process of structural reform aimed at restoring the rate of profit and resuming growth will materialize that will rather serve capitalists than professionals. The neo-liberal ideology, which emerged in the 1970s, together with globalism, was, at national level, the expression of this conflict. While the objective of globalism, at the international level, was to neutralize the newly industrialized countries (NICs) by weakening the respective nation-states, neo-liberalism was a domestic response to the fall of profit and growth rates that happened in the 1970s, and its aim was to reduce real direct and indirect wages by weakening the domestic state organization that supported labour and the welfare state.

Globalization is a real historical phenomenon involving technological, economic, cultural and juridical aspects. But it is interesting to observe in the developed countries, and particularly in the United States, how the association between the capitalist and the professional class was instrumental in protecting their national interests in relation to the threat represented by the NICs. Since the implicated economic interests were huge, politics and ideology had a major role. Globalization became apparent in the 1970s, in the same decade that the NICs emerged exporting relatively sophisticated goods produced by cheap labour. How did the rich countries, and particularly Washington and New York respond to such a threat? While domestically they responded to the fall of the rate of profit with neo-liberalism, internationally they responded with the 'globalist' ideology. Such ideology turned nation-states interdependent in such a measure that they became really irrelevant. Now, in this borderless and competitive world, nation-states would face, in the expression of one of its brightest ideologues, Thomas Friedman (2000), a 'straightjacket', so that they have no alternative but to copy the American model of growth. By successfully exporting this ideology, which was the combined outcome of the capitalist and the professional classes' ingenuity, the developed countries under the leadership of the United States were able to weaken the Latin American NICs. They were less successful in Asia, where governments' commitment to the national interest proved to be more resistant to the new truth coming from the developed countries. In fact, with globalization the countries became more interdependent, and business organizations compete at world level. However, what globalists forgot to mention was that globalization is the generalized competition at world level of business enterprises supported by their respective nation-states. Thus, the nation-state remains highly strategic and relevant, given its role of supporting national corporations. Yet instead of challenging the highly ideological claim that the nation-state had lost relevance, many progressive intellectuals limited themselves to lamenting this fact, or to attacking globalization. This is, again, an example of how insufficient or incompetent knowledge on the part of the progressive groups held back the necessary critique of the ideological claims issued by conservative groups associated with middle class professionals.

Yet neo-liberalism is already fading out in developed countries. It succeeded in curtailing the previous excessive state intervention and in restoring the rates of profit and growth, which was dangerously reduced in the 1970s, but it was unable to offer a sensible alternative to two major achievements in modern democracies: macroeconomic planning and the welfare state. That it is the reason why, not considering privatization but only the state apparatus *stricto senso*, neo-liberal reforms were unable to reduce this tax burden, and, so, the size of the state organization. On the other hand, globalism is being increasingly criticized in developing countries, particularly in Latin America, where it became dominant in the early 1980s, as it dramatically failed to promote economic growth. It is true that the only way to economic growth is capitalist, but we know that there are many varieties of capitalism besides the one based on foreign savings imposed on the countries that opened their capital account and remain chronically vulnerable in financial terms.[6] A demonstration of this fact are the dynamic Asian countries that for decades have continued to grow fast without opening their capital accounts, keeping their exchange rates under control, relatively undervalued, and combining market competition abroad with effective administrative and market coordination of the economy domestically.[7] In fact, knowledge capitalism is effective in protecting the rate of profit, because without it stability and growth are not possible, but it can also destroy some major institutional achievements such as the welfare state and macroeconomic policy. The welfare state assures social stability and political legitimacy. Economic policies complement the market coordination of the economy, on one hand by defending market competition and correcting resource allocation, and on the other by smoothing the cycle and stimulating investment and growth.

7. CONCLUSION

In conclusion, Galbraith's 1967 prediction that knowledge was replacing capital as the strategic factor of production was corroborated by the facts. This change, together with the substitution of organizations for family firms as the basic units of production, gave rise to a new social class – the professional middle class – characterized by the collective ownership of organizations. Yet, the emergence of the professionals' class did not imply the rise of a new social system, nor involve the concentration of political power in the hands of the new class. The economy remained controlled by the market, and oriented to profits, thus, capitalist. Yet instead of classical capitalism, what we have is a professionals' capitalism – a capitalism where the new class simultaneously shares income and power with capitalists while fighting particularly for power. The attempt by the new class of implanting a command economy was successful in achieving forced savings and promoting or consolidating initial industrialization, but the pure statist arrangement failed in the Soviet Union. On the other hand, the rise of democracy in the twentieth century represented a major check to the authoritarian tendencies of the new class, and to the power of both the capitalist and the professional middle class. Today, modern capitalist economies are mixed, not only because capitalists and professionals or knowledge people share power and income, but also because the coordination of the economic system is not based on a strong market and a minimum state, as neo-liberals dreamed, nor on a strong state and a weak market, as statists envisaged. Instead, it is founded on strong markets, because it is competitive and based on a entrepreneurial capitalist class, and on a strong state, in which elected and non-elected representatives of the professional middle class are able to organize collective action democratically and efficiently. This market is never so competitive, and the state is never so efficient and democratic as we would aim, but enough to keep economic and political development going.

Knowledge capitalism is part of the development process that modern societies have experienced since the capitalist revolution. Such economic, social, and political process is complex, contradictory, sometimes expensive, often unjust, but, anyway, progress. Despite all the drawbacks, professionals' capitalism represented advancement in relation to classical or liberal capitalism. Not only because this form of capitalism is more efficient than the previous one, but because it is more consistent with democracy and with a more even distribution of income. The essential reason for that probably lies in the fact that knowledge is more accessible to the lower classes than capital. Although knowledge may also be 'inherited', and, in moments of extremely fast technological progress, it may imply income concentration as demonstrated, it is more difficult for the rich to transfer knowledge to their children than capital. With professionals' capitalism, social mobility is higher, and equality of opportunity is a less utopian goal in knowledge than in classical capitalism. I know that this is an optimistic view that has been called into question during the last 30 years in terms of distribution of income, in so far as the supply of knowledge people was smaller than markets demanded, and salaries increased more than wages. But the guarantee of basic education to all, and the enormous increase in students enrolled in universities suggest this long-term optimism is not deprived of realism.

This belief in the positive qualities of mixed economies, and the critical view of 'conventional wisdom', a term that he coined, is present in most of John Kenneth Galbraith's work, since *American Capitalism: The Concept of Countervailing Power* (1957) and *The Affluent Society* (1958) till *The Good Society* (1996) and *The Economics of Innocent Fraud* (2004). He has always been more interested in the corporation than in the state, in the business manager than in the state bureaucrat, but he always made clear that the key for understanding contemporary capitalism is in the interplay of these two entities and their respective agents. And, he always has an innovative view to present. In his last book, for instance, he says: 'A large and expanding part of what is called the public sector is for all practical effect in the private sector. ... Arms expenditure does not occur after detached analysis by the public sector as commonly understood' (Galbraith, 2004, p. 34). This subject will be dealt with in other chapters of this book, notably Chapter 14 (Jordi Molas-Gallart and Puay Tang) and Chapter 15 (Luc Mampaey and Claude Serfati).

In so far as it is a social class, the major weakness of the professional middle class is the lack of a clear political commitment. Their members' interests are diversified, their associations depend heavily on whom they work for. If we are speaking of professionals working for private organizations, they will easily be associated with the capitalist class. If they work for the state, either as politicians or as civil servants, or for non-profit organizations, they may be more autonomous. In democratic regimes, the members of the professional middle class, instead of just allying themselves with the capitalists, as they often do, or of attempting to become fully autonomous, as happened in the

Soviet Union, may also ally themselves with the workers and the poor, and display a republican attitude toward the basic citizenship rights and the public interest. If this tendency is confirmed, their political power will probably continue to increase in the future at the expense of the capitalists, but, as a trade-off, they will have to share it with the common people.

NOTES

1. I developed the concept of organization as the specific relation of production or form of ownership in the statist system in Bresser-Pereira (1977).
2. I first identified collective entrepreneurship as the central form through which innovation and economic development takes place in modern capitalism in Bresser-Pereira, 1962.
3. Lloyd Warner (1953) identifies social mobility, essentially based on capitalist entrepreneurship, as 'the American dream'.
4. It is interesting to note that orthodox economists, which, for their economic liberalism, are almost always associated with the capitalists, are particularly prone to indict politicians as 'populists'.
5. This theme is extensively discussed in Bresser-Pereira (2002, 2004).
6. I have been involved in the critique of the growth *cum* foreign savings (or current account deficits) strategy since 1999. On the subject, see particularly Bresser-Pereira (2001, 2004), Bresser-Pereira and Nakano (2002), Bresser-Pereira and Varela (2004), all available at www.bresserpereira.org.br.
7. Besides some classical works on the Asian economies, as Wade (1990) and Amsden (1989), and even the acknowledgement by the World Bank (1993) of the possibilities of mixed, market and state coordinated economies, see the recent analysis by Dooley et al. (2003) on the new structure of the world economy that is rising, 'the new Breton Woods', characterized by three great economic groups: the United States, which grows, involves in consumption, and gets indebted; the 'trade group' (the dynamic Asian countries), which keep control of their exchange rate, export, and grow; and the 'capital group' (Europe, joined, surprisingly(!), by Latin America), which are concerned with the financial return on investments and grow slowly.

REFERENCES

Amsden, Alice H. (1989), *Asia's Next Giant*, Oxford: Oxford University Press.

Becker, Gary S. (1962), 'Investment in human capital: a theoretical analysis', in 'Investment in Human Beings', NBER Special Conference 15, supplement to *Journal of Political Economy*, October.

Becker, Gary S. (1964), *Human Capital*, 3rd edn, reprinted 1993, Chicago: University of Chicago Press.

Berle, Adolf and Gardiner Means (1932), *The Modern Corporation and Private Property*, reprinted 1950, New York: McMillan.

Bresser-Pereira, Luiz Carlos (1962), 'Desenvolvimento e Econômico e o Empresário', *Revista de Administração de Empresas*, (4), May, reprinted 1992 na própria *RAE*, **32** (3) (July), 79–91.

Bresser-Pereira, Luiz Carlos (1972), 'A Emergência da Tecnoburocracia', in L.-C. Bresser-Pereira, *Tecnoburocracia e Contestação*, Rio de Janeiro: Editora Vozes, pp. 17–140. (Reprinted in *A Sociedade Estatal e a Tecnoburocracia*, São Paulo: Editora Brasiliense, 1981, pp. 17–140).

Bresser-Pereira, Luiz Carlos (1977), 'Notas introdutórias ao modo tecnoburocrático ou estatal de produção', *Estudos CEBRAP*, no. 21, April: 75–110.

Bresser-Pereira, Luiz Carlos (1981a), *A Sociedade Estatal e a Tecnoburocracia*, São Paulo: Editora Brasiliense.

Bresser-Pereira, Luiz Carlos (1981b), 'Classes and social strata in contemporay capitalism', available at www.bresserpereira.org.br.

Bresser-Pereira, Luiz Carlos (2002), 'Why did democracy become the preferred form of government only in the twentieth century?', paper presented to the III Conference of the Brazilian Society of Political Science, ABPC, Niteroi, 29–31 July, accessed at www.bresserpereira.org.br.

Bresser-Pereira, Luiz Carlos (2004), *Democracy and Public Management Reform*, Oxford: Oxford University Press.

Bresser-Pereira, Luiz Carlos and Yoshiaki Nakano (2002), 'Economic growth with foreign savings?', paper presented at the Seventh International Post Keynesian Workshop, Kansas City, MO, 28 June–3 July, accessed at www.bresserpereira.org.br., and in Portuguese in *Revista de Economiz Politice*, **22** (2) (April), 3–27.

Castells, Manuel (1996), *The Rise of the Network Society* (vol. I of *The Information Age*), Oxford: Blackwell.

Dooley, Michael, David Folkerts-Landau and Peter Garber (2003), 'An essay on the revived Breton Woods system', Cambridge, MA: National Bureau of Economic Research, Working Paper 9971, September.

Drucker, Peter (1993), *Post-capitalist Society*, New York: Harper Business.

Friedman, Thomas (2000), *The Lexus and the Olive Tree*, 2nd edn, New York: Random House.

Galbraith, John Kenneth (1957), *American Capitalism: The Concept of Countervailing Power*, 2nd edn, Boston: Houghton Mifflin.

Galbràith, John Kenneth (1958), *The Affluent Society*, Boston: Houghton Mifflin.

Galbraith, John Kenneth (1967), *The New Industrial State*, republished 1979, New York: A Mentor Books.

Galbraith, John Kenneth (2004), *The Economics of Innocent Fraud: Truth for Our Time*, Boston: Houghton Mifflin.

Gramsci, Antonio (1934), *Selections from the Prison Notebooks of Antonio Gramsci*, Q. Hoare and G. Smith (eds), New York: International Publishers, 1971, adapted from material written in Italian around 1934.

Hilferding, Rudolf (1910), *El Capital Financiero*, from the Spanish translation of the first German edition, republished 1963, Madrid: Editorial Tecnos.

Schumpeter, Joseph Alois (1911), *Theorie der wirtshaftlichen Entwicklung*, Leipzig: Duncker & Humblot.

Schultz, Theodore W. (1961), 'Investment in human capital', *American Economic Review*, **51** (1), March, 1–17.

Schultz, Theodore W. (1980), *Investing in People*, Berkeley: University of California Press.

Wade, Robert (1990), *Governing the Market*, Princeton, NJ: Princeton University Press.

Warner, William Lloyd (1953), *American Life: Dream and Reality*, Chicago: University of Chicago Press.

World Bank (1993), *The Asian Miracle*, New York: Oxford University Press.