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The Limits of Theory: Detecting Contemporary Global Change and Predicting the Future of the States System

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1 Introduction

In this chapter we explore the extent to which a systems approach to international relations can help us get a grip on the changes that are, and have been taking place in the international system. We will do this by focusing on two crucial changes characterizing the contemporary global order, which can have far-reaching consequences for the existing Westphalian states system: (1) the end of the bipolar structure of the international political system, which had been with us since the middle of the 1950s, as a result of the collapse of the Soviet Union and its disappearance as a superpower, and (2) the increase in the level of interdependence among national economies.

In Section 2, we discuss the relevant theoretical notions provided by the systems approach to international relations as introduced by Waltz (cf. Waltz 1979). Our discussion is primarily based on a brief review of some pertinent perceptions on the relationship between agent and structure in the international system published by various IR-researchers in the course of the last decade. These perceptions resulted from a major re-thinking of IR-theory, which was set off by the historically unprecedented, and theoretically unexpected, peaceful disintegration of the Soviet empire.

In Section 3, we try to establish to what extent we can substantiate the presumed changes with empirical data. Finally, in Section 4, we turn to the question of what, on the basis of our theoretical understanding and our

empirical results, we can say about the future of the international system. Do the end of bipolarity and the rise in interdependence sound the death-knell of an international system in which sovereign, territorial states are the dominant players?

1 Theory: Understanding Contemporary Global Change

2.1 A SYSTEMS APPROACH

A first step to understanding contemporary change at the global level, is to assume that it is possible to divide the universe of possibly relevant phenomena into phenomena that are relevant to the explanation of it, and those that are not. The ones that are relevant are considered to be part of a *system* - in this case, of course, an international system. These phenomena, or *elements* of the system, are somehow interrelated. This means that 'the conduct or state of anyone of the elements is influenced by the conduct or state of the other elements' (Lieshout 1995: 17). Moreover, as far as these elements are concerned, a distinction should be made between the *actors* (or the *interacting units*) on the one hand, and the *structure* on the other. In this we follow Waltz's exposition of the systems approach in *Theory of International Politics* (Waltz 1979). According to Waltz, 'at one level, a system consists of a structure, and the structure is the systems-level component that makes it possible to think of the units as forming a set as distinct from a mere collection. At another level, the system consists of interacting units' (*ibidem*: 40).

A systems approach implies that the actors in the system under consideration are assigned a certain motive to act. This is the so-called 'explanatory principle'. In the case of the international system we assume that the actors try to survive in that system. The actors do this by adapting to the system's structure to the best of their knowledge. It is up to the actors to find out what the structure looks like and to decide whether or not they want to comply with it. The structure does not determine the actors' behaviour. The manner in which this adaptation process takes place can, in turn, have consequences for the structure of the system. If this possibility were excluded, then there would be no need for a systems approach (cf. *ibidem*: 58). A systems approach also involves a decision as to which of the elements in the system under consideration will be conceived of as the actors in the system

and which ones as part of the structure. This choice of the actor is guided purely by methodological considerations. The only thing that matters is that our choice of the actor promises to provide us with the best possible answers to the types of question we wish to answer (cf. Lieshout 1995: 19-20). Since it is our aim to understand contemporary change at the global level, we think it is best to assign the explanatory principle to the state, and not to so-called 'non-state actors', such as multinational corporations, international organizations, or transnational social movements. Thus the international system is a states system.

2.2 WALTZ'S THREE-PART DEFINITION OF STRUCTURE

We start our 'imaginative construction' of the states system (cf. Collingwood 1957 [1946]), which should enable us to identify the most significant changes it went through during the 1990s, with a discussion of the structure of that system on the basis of Waltz's 'three-part definition of structure'. In his view, structures are defined: 'first, according to the principle by which a system is ordered'; 'second, by the specification of functions of differentiated units'; and 'third, by the distribution of capabilities across units' (Waltz 1979: 100-1).

With respect to the first part of his definition, Waltz defends the position that systems are ordered either anarchically or hierarchically. The states system is ordered anarchically. This does not imply that chaos reigns in the states system. It merely means that the states system is one of self-help. It lacks an agency that, if necessary, can force states, even the mightiest among them, to abide by the rules and keep their promises. In Waltz's view anarchy is the most fundamental property of the states system. It constitutes the latter's 'deep structure', to use the expression introduced by Ruggie (Ruggie 1986: 135). It should, however, not be forgotten that 'anarchy, taken by itself, can never explain why states sometimes do cooperate with one another, and sometimes do not, why certain states regularly wage war upon one another, and others coexist peacefully for centuries' (Lieshout 1999: 18). As far as the ordering principle of the international system is concerned, we think there is general agreement that it has not changed during the 1990s. The states system is still an anarchy. As Waltz observed in an interview recently published in the *Review of International Studies*: 'It's a self-help system. The system has not been transformed' (Halliday and Rosenberg 1998: 378).

Concerning the second part of the definition, 'the specification of functions of differentiated units', Waltz is of the opinion that this part 'is not needed in defining international-political structure, because so long as anarchy endures, states remain like units' (Waltz 1979: 93). In his view 'the functions of states are similar, and distinctions among them arise principally from their varied capabilities' (*ibidem*: 97). This leads Buzan, Iones and Little to the conclusion that 'in Waltz's logic, these two tiers are so closely linked as to be nearly opposite sides of the same coin' (Buzan *et al.* 1993: 38), and that, therefore, they *together* constitute the international system's deep structure. Waltz's position was based, interestingly enough, on a comparison of the *internal* functions of the states in terms of government (cf. Waltz 1979: 96-7). He appears never to have considered the possibility of functional differentiation *between* states, although it is certainly not excluded by his three-part definition of structure. † This is quite remarkable seeing that in certain parts of the globe, most notably the area covered by the North Atlantic Treaty Organization, there exists a clear division of labour between states as far as the use of force is concerned. That Waltz failed to take note of this type of functional differentiation, must be attributed to his treatment of the role of force in the international system. If in national politics force serves as the *ultima ratio*, then this is the result of 'the previous submission of force to methods of reason'. Such a submission had, however, not taken place in the international system, with the result that in 'international politics force serves, not only as the *ultima ratio*, but indeed as the first and constant one' (*ibidem*: 113). Apparently, Waltz views the situation of the states in the international system as essentially the same as that of Thomas Hobbes' 'kings, and persons of sovereign authority', for whom the state of nature is a fact of life, since in the Hobbesian state of nature no division of labour is possible (Hobbes 1946 11651J: 82 and 83; cf. Lieshout 1995: 120).

Buzan *et al.* also note Waltz's failure to consider the possibility of functional differentiation between states. At one point they observe that Waltz relies on a 'very partial characterization' of the effects of competition on the behaviour of states, namely that it leads to imitation. In their view, this approach 'discounts another side of the analogy from economic behavior, which is the search for market niches, where differentiation of function provides (temporary) refuge from the full pressure of competition' (Buzan *et al.* 1993: 40; cf. also Schroeder's discussion of 'hiding' in Schroeder 1994). Accordingly, they 'insist', and we agree with them on this, that the function-

al similarity of states 'is not a logical consequence of anarchy. It is possible, after all, to conceive of functionally differentiated units operating in an anarchic system and there are substantial historical precedents for systems with these structural features' (*ibidem*: 88). If we want to understand the ways in which the states system works, then the second 'tier', as far as the extent of the division of labour between states is concerned, cannot be left out of consideration.

When we now ask ourselves whether there has been a change in the degree of functional differentiation between states, then the answer must be in the affirmative. In particular with respect to the use of force there has been an increase in the division of labour between states. [In the course of the last decade, the United States has developed more and more into the world's policeman. Other states, even major ones like Germany and Japan, are quite prepared to leave to the United States the task of actual peace-enforcement in the world's trouble spots, even if these are situated in their own back yards. However, this development has, as yet, had no major consequences for the international system.

In view of the collapse of the Soviet Union, such a qualification certainly does not apply to the changes that have taken place in the third part of Waltz's definition, the 'distribution of capabilities across units', or the *distributional structure*, as Buzan *et al.* have very conveniently called it. Traditionally, three types of distributional structure are distinguished: a multipolar structure, which means that there are more than two great powers in the states system; a bipolar structure, in the case of two great powers; and a hegemonic or unipolar structure, when there is only one great power in the states system. By the mid-1950s (cf. Lebow 1995: 30-1) a bipolar structure came into existence with the United States and the Soviet Union as the 'poles'. The disintegration of the Soviet empire implied the destruction of this structure. As many have noted since the publication of *Theory of International Politics*, Waltz did not pay attention to the question of how the distributional structure could change from one kind of polarity to another (cf. especially Ruggie 1986). Very likely because he was confident that the then-existing bipolar structure would endure, in particular since, as far as the rank of great powers was concerned, the 'barriers to entry [had] risen' (Waltz 1979: 177). Accordingly, Waltz's 'logic of anarchy' is of no great use if we wish to understand the factors that led to the fall of the old distributional structure and the rise of the new one. This understanding can only be obtained if Waltz's narrow conception of structure is expanded by adding

two other elements: first, the system's *interaction capacity* and, second, the *internal* structure of the states, in particular the states' *learning capacity*.

Before we start our discussion of these elements, however, we should address one other matter: the relationship between the first two 'tiers' of Waltz's definition of structure and the third 'tier'. Ruggie has observed that Waltz in *Theory of International Politics* assigned 'causal priority' to the first two tiers. The deep structure 'prestructures' the distributional structure (Ruggie 1986: 150; cf. also Buzan *et al.* 1993: 87 and 89). Although we agree with Ruggie that in Waltz's approach the deep structure has causal priority, the problem remains of what actually is meant by 'prestructuring' if anarchy by itself can lead to three different types of distributional structure. A few years ago, therefore, one of us argued that it is actually the other way around. It is the distribution of capabilities across the interacting units - in other words, the system's degree of polarity - that 'prestructures' a system's ordering principle. In this approach anarchy and hierarchy are not seen as two, opposing, ordering principles, but as manifestations of one and the same ordering principle: the distribution of capabilities across the actors in the system. Anarchical and hierarchical systems can then be placed on a continuum of types of system on which they are ordered on the basis of their degree of polarity. As capabilities become more concentrated in a system, that system shifts on the continuum further and further in the direction of a 'perfect' hierarchy, whereas, conversely, as capabilities in a system become more evenly distributed, that system shifts further and further in the direction of a 'perfect' anarchy (cf. Lieshout 1995: 94-5 and 111). This approach has the added advantage that it is more elegant. Anarchy and hierarchy are no longer two distinct ordering principles that both have to be assumed, but can be deduced from one ordering principle.

2.3 INTERACTION

In order to provide Waltz's theory with a 'transformational logic', Ruggie has introduced the concept of 'dynamic density', which he took from Durkheim. Dynamic density concerns 'the quantity, velocity and diversity of transactions that go on within [a system]' (Ruggie 1986: 148; cf. also Spruyt 1994: 12). Changes in dynamic density will lead to changes in the distributional structure, and will also have their effect on the extent of the functional differentiation between states. It is 'common knowledge' that the dynamic density of the international system has increased spectacularly in the last

decades; not only in the form of the internationalization and globalization of the economy, a subject we return to in Section 3, but also the development of nuclear weapons and ballistic missiles, the consequences of which we touch upon in Section 4.

Buzan *et al.* share Ruggie's point of view, although they prefer the term 'interaction capacity' to 'dynamic density'. They consider the introduction of interaction capacity - which, according to them, has two aspects: technology and 'shared norms and organizations' (Buzan *et al.* 1993: 70) - as one of the most important elements in their project to extend the Waltzian framework. Naturally the question remains at which level of the system interaction capacity should be placed. Contrary to Waltz - 'interactions, as I have insisted, take place at the level of the units' (Waltz 1979: 80) - Buzan *et al.* advocate the introduction of a third level of analysis, seeing that interaction capacity concerns 'a set of variables that clearly belong within a system theory of international politics, but which are neither structural nor unit level in character' (Buzan *et al.* 1993: 72). This is the 'process' level, or the level of 'process formations', to which are assigned all the interactions between the units of the system that cannot be considered to be simply attributes of these units (*ibidem*: 1993: 48-50). In this they follow Keohane and Nye, who some years before argued in favour of adding a third process level, as it would enrich 'our ability to theorize' (Keohane and Nye 1987: 747). This process level would refer to 'patterns of interaction: the ways in which the units relate to each other' (*ibidem*: 745), and would contain such things as 'technological change, economic interdependence, and issue density', as well as 'international rules, norms and institutions' (*ibidem*: 747).

In our opinion it is not necessary to introduce a third level of analysis. The reason why Keohane, Nye, Buzan *et al.* and many others, have great difficulty in finding a place for 'process formations' in the simple structure-unit scheme of systems theory, is that they tacitly conceive of structure - and Waltz, of course, too! - as something that should be more or less permanent, while 'process formations' can change very rapidly in a relatively short period of time. However, this is a misconception. As De Vree has pointed out, 'every system has a structure, however inchoate, disorganized or entropic it may be' (De Vree 1990: 640). As we see it, a system's structure amounts to nothing more than the boundary conditions, which are themselves continuously subject to greater or smaller changes, to which the interacting units have to conform if they wish to maintain themselves in the system. It is up to the units to find out what these boundary conditions look like and to decide whether or not they want to comply with them.'

As far as the states system is concerned, a distinction then must be made between the *external* structure of the states on the one hand, and the *internal* structure of the states (which we discuss in the next subsection) on the other hand. Deep structure, distributional structure, as well as process formations, belong to the external structure. It refers to boundary conditions of the following kind: the way in which states are positioned *vis-a-vis* one another, the degree of polarity of the states system, the degree of stability of the states system, the level of international cooperation (whether on an *ad hoc* basis, or institutionalized in the context of international organizations), the extent of the international division of labour, and the state of technology (e.g. weapons or communication technology). Besides these more or less 'brute' aspects, the external structure also comprises 'soft' aspects, or, as Wendt put it, 'the intersubjectively constituted structure of identities and interests in the system' (Wendt 1992: 401). The soft aspects involve both the states' common 'principled beliefs' on how foreign policy and diplomacy should be conducted, and their common 'causal beliefs' on the best way for a state to survive in the international system (cf. Lieshout 1999: 16-17 and Schroeder 1996 [1994]: x).

2.4 THE INTERNAL STRUCTURE OF THE STATE

The second addition to Waltz's three-part definition of structure necessary to understand changes in the distributional structure of the international system follows from the perception that the international system is an 'actor-dominant system' and not a 'parametric system' (Nicholson 1990 [1989]: 116), or, put in economic terms, that it is an oligopoly and not a perfectly competitive market. In a system of the latter type, the behaviour of the actors can be explained without any reference to their internal structure, whereas in a system of the former type this is not possible, at least where it concerns the behaviour of the most powerful actors in the system (the internal structure of the small actors can safely be ignored most of the time). We cannot get a grip on the Soviet leadership's reactions to the Soviet Union's steadily declining economic performance that, in the end, resulted in the demise of bipolarity, if we do not take the Soviet Union's internal structure into account. The Soviet leaders faced a 'double security dilemma'. Like all 'agents of the state' they were 'constrained not only by the international structure associated with the balance of power, but also by the domestic political structure... like Janus, [they were] required to look in two direc-

tions simultaneously. They were confronted by two sets of structures: one internal and the other external' (Buzan *et al.* 1993: 120), where the internal structure of a state refers to such things as the state's GDP, its military might, the size of its population, its natural resources, its geographical situation (does it border on the sea, or is it landlocked?), and the manner in which political decision-making is organized (is the state a democracy, or is it a dictatorship?), et cetera.

As we mentioned before, a crucial aspect of the state's internal structure concerns the state's adaptability or learning capacity (cf. also Van Kersbergen's contribution to this volume). This refers particularly to the ways in which the state processes information on its external *and* internal structure and the changes therein, and its capacity for decision-making, whether collective or not, in order to carry through the necessary adjustments. The better the information, and the greater a state's capacity for decision-making - in other words, the better its ability to learn - the sooner a state is able to take advantage of these changes. In our view it is evident that in the last decades, in response to the spectacular rise of the international system's interaction capacity, the great majority of states have put much effort in increasing their adaptability.

One should keep in mind that the changes in the external and internal structure are not objectively given to the state. In the international system there exists a certain 'dialectic between subjectivity and objectivity' (Keohane 1989: 42; cf. Wendt 1992: 397). The 'realities' of the external and internal structure as perceived by the state are always the result of a process of active interpretation by the state in the light of its 'causal beliefs' (its 'theories') about the nature of these structures. Indeed, the 'world is always an interpreted "thing"' (George as cited in Price and Reus-Smit 1998: 271). Which interpreted 'thing' corresponds better with reality, and which one less so, subsequently can only be discovered through a process of trial and error (cf. Lieshout 1995: 177).

In view of our discussion of the internal structure we have to address one further question, namely, which elements in the system are to be considered as parts of the actor? Are there any elements left for her? We think the answer must be in the negative. To be sure, we have assigned the actor a motive to act, but this cannot be regarded as an element of the system in the same way as 'brute' facts like capabilities or 'institutional' facts like norms and values. The explanatory principle is a tautology. It is true in all possible worlds. In systems theory the actor and, accordingly, the state, has no sub-

stance. External structure and internal structure have a 'history', and both histories weigh heavy on the states when making choices, but the states themselves, being the actors in the system, have no history. They are timeless. The state is no more than a 'category of thought necessary to clear thinking about international relations' (cf. Can 1964 [1939]: 150). It cannot be denied that this makes 'the state' a rather elusive entity. The central element in the international system around which everything is supposed to turn, turns out to be no more than an empty shell! But before rushing to the conclusion that this can only mean that a systems approach is too ridiculous to deserve serious consideration if we wish to understand contemporary change at the global level, it is well to realize that 'the state' is just as elusive as that other ghost in the machine, 'the self'.

3 The Limits of Theory: Detecting Contemporary Global Change

3.1 CHANGES IN THE DISTRIBUTION OF POWER

In this Section, we try to find out, by using quantitative historical data, whether the presumed change in distributional structure and the increase in interaction capacity accepted unquestioningly in the previous Section, can be substantiated empirically.

As far as the distributional structure is concerned, one should realize that there exists no one best way to establish the distribution of power in the international system at a certain moment in time, if only because power is such an elusive concept. In the first place, there are many possible empirical attributes attached to the international power concept. Scholars who have tried to measure international power have focused on such different variables as: military potential, economic wealth, the size of the population, the possession of natural resources, and the like. In the second place, it is difficult to establish the international power position of states because the outcome of political processes, which imply the use of power, is determined not only by the possession of power resources; intangible factors such as the skilfulness and the commitment of the wielders of power (often the military) are also important. Thus, discussions about the nature of the Soviet threat during the Cold War often concerned the supposed differences in aptitude and commitment of the armed forces of the United States on the one hand and those of the Soviet Union on the other. In the third place, the

extent of state power is affected by the *fungibility* of resources. This term refers to the possibility to use resources for more than one purpose. For instance, money is a fungible resource, since it can be applied for investment in productive capital, for spending on consumption or for the build-up of military might. Weapons, on the contrary, are a non-fungible resource (this applies in particular to nuclear weapons).

With these restrictions in mind, we turn to some analyses of the distributional structure of the international system in the twentieth century. For want of a perfect measure, we adopt a next-best approach by focusing on countries' gross domestic product (GDP) and on the possession of nuclear weapons.³ We use GDP figures because data on GDP are readily available for an extended period and for many countries. Moreover, GDP figures are a function both of the size of the population and the level of wealth of a country, which are two important components of the concept of power. We use data on nuclear weapons because it is generally acknowledged that the possession of such weapons is a necessary - though, of course, by no means a sufficient - condition for great power status in the post-World War II period.

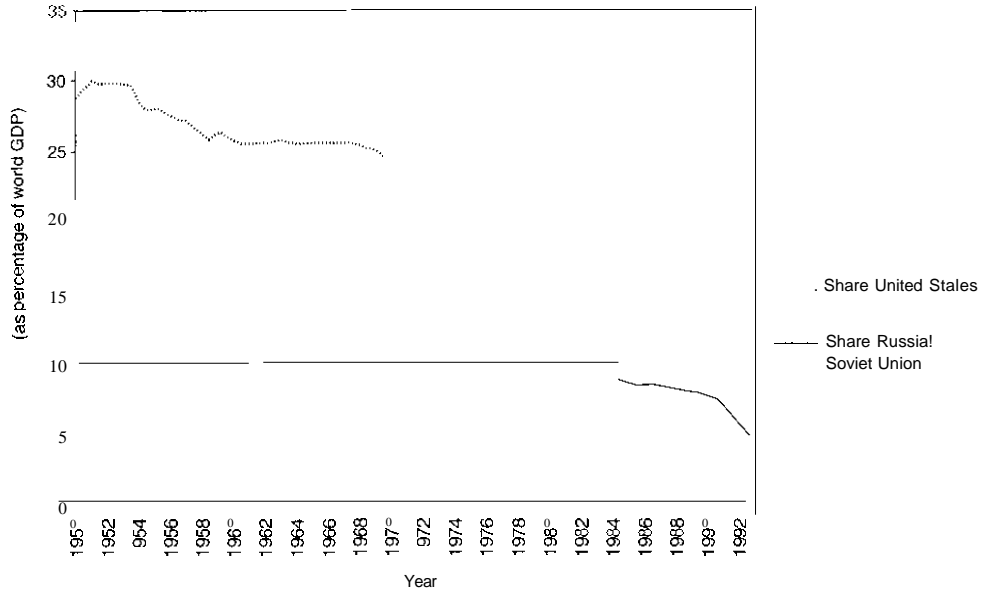
After World War II, the United States and the Soviet Union came to dominate the international system. The data has been taken from Maddison's study of the development of the world economy (Maddison 1995). The change to bipolarity is only partially reflected in GDP data, which have been used to draw Figures 3.1 and 3.2.

Figure 3.1 presents the development of the GDP of the Soviet Union/Russia and the United States, as a percentage of global GDP, between 1950 and 1992. Figure 3.1 indicates that for the entire period since World War II the two so-called superpowers together commanded less than half of world GDP, and that the gap between the United States and the Soviet Union/Russia in terms of GDP remained very large.

The relative position of the two superpowers *vis-à-vis* each other is more clearly depicted in Figure 3.2. This figure indicates that the ratio between the GDP of the two countries was roughly 5 to 1 just after World War II, with the Soviet Union producing merely 20 per cent of the United States' GDP. Although the ratio between the superpowers' GDP has changed considerably in the 1945-1992 period, it never became less than 2 to 1. The best result achieved by the Soviet Union was 45 per cent of US GDP in 1975.

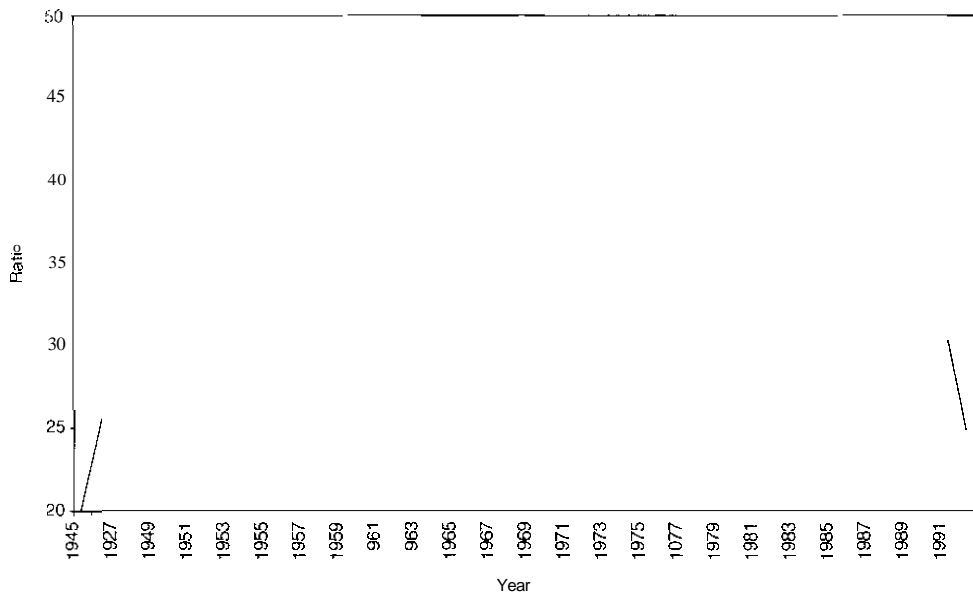
The approach used here provides only partial understanding of the development of the distributional structure during the Cold War. The United States was clearly in the lead with a share of world GDP ranging between 30

Figure 3.1: GDP Shares of the Soviet Union/Russia and the United States, 1950-1992



Source: Maddison (1995), Tables C-16a, C-16c, E-2

Figure 3.2: Ratio between GDP of Soviet Union/Russia and United States, 1945-1992



Source: Maddison (1995), Tables C-16a, C-16c, E-2

per cent just after World War II and more than 21 per cent at the beginning of the 1990s. At the peak of its might, in the 1960s and 1970s, the Soviet Union produced between 10 and 11 per cent of world GDP. Both countries had a clear lead over the country which was third in terms of GDP; at first, this was China, then Japan, and from the 1980s onwards again China'

Our analysis of the distributional structure in terms of GDP shares is partial also because it does not reflect adequately the build-up of military might, especially the development of nuclear weapons and the military presence of the United States and the Soviet Union in many parts of the world, which demonstrated the clear dominance of the two superpowers in international politics. The data presented in Table 3.1 illustrate the huge gap in military capabilities that existed between the two superpowers on the one hand, and the three other declared nuclear powers on the other hand. Table 3.1 also makes clear that this gap has persisted until this very day. The data on Russia's military capabilities show why this country still holds some-

Table 3.1 Strategic Nuclear Weapons Arsenals of the Nuclear Weapons States, 1946– 1998

<i>Year</i>	<i>United States</i>	<i>Soviet Union / Russia</i>	<i>United Kingdom</i>	<i>France</i>	<i>China</i>
1946	9				
1950	400				
1954	1,418				
1958	2,610	186	40		
1962	3,267	481	180		
1966	4,607	954	194	36	10
1970	4,960	2,216	144	36	75
1974	9,324	2,795	144	86	165
1978	10,832	5,516	144	114	250
1982	10,515	8,904	128	130	300
1986	12,386	10,108	96	218	325
1990	11,966	10,880	96	452	324
1994	8,332	9,823	100	444	254
1998	7,256	6,210	160	429	197

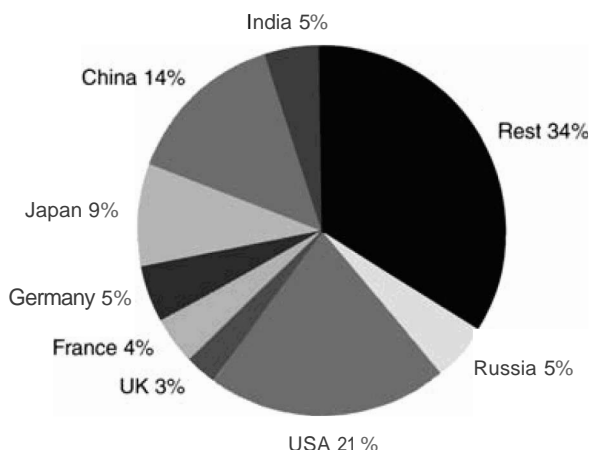
Sources: SIPRI (1991), Table 1.8; SIPRI (1994), Tables 8.1-5; SIPRI (1998), Tables 10A.1-5

Note: The figures displayed refer to strategic nuclear warheads. The figures of 1994 and 1998 have been calculated by us and refer to warheads all weapons systems with a range of 2,500 kilometres or more.

thing of a special position in today's international politics, although the economic base for its claims to great power status has been wiped out almost completely (see also the contribution by Weenink and Correlje to this volume).

At this moment, it is by no means clear what exactly has been the influence of the breakdown of the Soviet Union on the distributional structure in the post-Cold War period. Again, as was the case with the analysis of US-Soviet power relations, the analysis of GDP shares does not lead to an unequivocal result. Figure 3.3 represents the distribution of world GDP among the eight largest economies in 1992. The United States remains the largest economic power in the world, with a share of world GDP of 21 per cent. It is obvious that Russia's economic position has dwindled; with a share of little over 5 per cent of world GDP the country has almost been reduced to economic insignificance. At the same time, however, it is remarkable that China has taken over the runner-up position in the world economy, at least in terms of GDP size. What is even more interesting is that the ratio of Chinese to US GDP has passed the level of 6 to 10, a level that was never reached by the Soviet Union in the era of bipolarity. We will return to China's economic position in Section 4.

Figure 3.3: CDr Share of the Eight largest Economies, 1992



Source: Maddison [1995), tables C-16a, C-16c, C-16e, E-1

The analyses presented thus far indicate that the end of the bipolar international system can be illustrated with data on the distribution of GDP. When the data on the possession of nuclear weapons systems is taken into consideration, however, a somewhat different story needs to be told. At the end of the 1990s, Russia remains one of the five declared nuclear weapons states, with a clear lead, in terms of nuclear warheads, on France, China and the United Kingdom. Russia's nuclear weapons arsenal, however, is relatively old: the latest round of modernizations dates back to 1987. As one authoritative source has commented: 'Russia's plans to modernize its strategic nuclear forces continued to be severely constrained by shortfalls in the Russian defence budget' (SIPRI 1998: 434). It can thus be expected that the economic hardship presently hitting Russia will lead to a further deterioration of Russia's position as an important player in international political-military relations.

At the moment it is unclear what type of distributional structure has emerged, or is emerging, after the fall of the Soviet Union. As far as a return to multipolarity is concerned, there is the obvious problem of the enormous power differential between the United States on the one hand, and the other candidates for great power status - presumably China, Japan, Germany and Russia - on the other hand. This great difference in power makes it very difficult to treat the latter as members of the same class the United States is in. This also precludes the possibility that bipolarity still continues. None of the four powers mentioned has attained a position comparable to that of the Soviet Union in the bygone era, especially as far as nuclear weapons are concerned. At the same time, we are quite confident that the last possibility a change in the direction of unipolarity or hegemony, has also not taken place. Such a change of distributional structure would require a clear preponderance of one of the great powers. However more powerful than the other states, the United States does not appear to have acquired such a preponderance.

3.2 THE INCREASE OF INTERACTION CAPACITY

In the 1990s, many authors have written about the purported tendency towards globalization or internationalization of relations in the international system. These terms are generally used to describe two separate, but linked developments in the contemporary system. Globalization, as defined by Scholte, is a process resulting in 'global conditions [that] are situated in a

space beyond geometry, where distance is covered in effectively no time' (Scholte 1996: 46). The significance of territorial borders is reduced: 'borders are not so much crossed or opened as *transcended*... Territorial distance and territorial borders hold limited significance in these circumstances: the globe becomes a single "place" in its own right' (Scholte 1997: 431). By contrast, *internationalization* is the intensification of cross-border relations (Sie Dhian Ho and Hout 1997: 3).

The twin tendencies of globalization and internationalization indicate an increase in the international system's interaction capacity⁵ We now wish to determine the extent to which the interaction capacity has increased in fact, and assess the implications of this development.

A first and widely accepted indicator of interaction capacity is the level of trade of national economies. Table 3.2 presents some data on the growth of exports of major economies since] 820.

Table 3.2 Merchandise Exports as Per Cent of GDP

	1820	1870	1913	1929	1950	1973	1992
France	1.3	4.9	8.2	8.6	7.7	15.4	22.9
Germany	<i>N/A</i>	9.5	15.6	12.8	6.2	23.8	32.6
Netherlands	<i>N/A</i>	17.5	17.8	17.2	12.5	41.7	55.3
United Kingdom	3.1	12.0	17.7	13.3	11.4	14.0	21.4
Total Western Europe	<i>N/A</i>	10.0	16.3	13.3	9.4	20.9	29.7
USA	2.0	2.5	3.7	3.6	3.0	5.0	8.2
USSR/Russia	<i>N/A</i>	<i>N/A</i>	2.9	1.6	1.3	3.8	5.1
Japan	<i>N/A</i>	0.2	2.4	3.5	2.3	7.9	12.4
China	<i>N/A</i>	0.7	1.4	1.7	1.9	1.1	2.3
India	<i>N/A</i>	2.5	4.7	3.7	2.6	2.0	1.7
Total Asia	<i>N/A</i>	1.3	2.6	2.8	2.3	4.4	7.2
World	1.0	5.0	8.7	9.0	7.0	11.2	13.5

Source: Majlisoli (1995), Table 2.4

Note: *N/A* means data not available.

The general impression that one gets from Table 3.2 is that the level of world exports, calculated as a percentage of CDI, has increased considerably, both in the nineteenth and twentieth century. World exports have increased, in an almost straight line, from 1.0 per cent of CDI in 1820 to 13.5 per cent in 1992. The period of the Great Depression and the Second World War caused a temporary lapse in this development. The general tendency of increasing exports holds for most of the major economies of the world, even for relatively 'closed' ones, such as the United States, the USSR/Russia, Japan and China. Among the larger economies of the world, India is the exception to the rule. On the whole, one must conclude that the level of internationalization, as measured by cross-border trade, has increased considerably and, in 1992, reached a height unprecedented in the history of the international system. At the same time, however, the data presented in Table 3.2 show that national economies are only in the process of becoming internationalized, because economic activity is still predominantly focused nationally. Two exceptions should be noted. The first concerns Western Europe. The increase of exports of member countries of the European Union has reflected, to an important extent in result of the completion of the internal market, the growth of intra-European trade (cf. Van Aarle 1996: 130). This is a sign of regionalism, and as such it must be distinguished, analytically at least, from full-fledged internationalization or globalization. The second exception is formed by several East Asian countries, which have adopted a strategy of export-led growth and export their goods predominantly to the United States and Western Europe.

A second indicator of internationalization is the increase of foreign direct investment. The data on recent trends in foreign direct investment of the member states of the Organization for Economic Cooperation and Development (OECD) are summarized in Table 3.3.

The two columns of Table 3.3 contain two different indicators for foreign direct investment in the OECD area. The first column contains the index numbers of foreign investment of all OECD countries in current prices. The second column presents the ratio of foreign direct investment to the sum of gross domestic products of all countries in the OECD area. The first column indicates that foreign investment from OECD countries showed a significant increase during the second part of the 1980s. After a sharp fall in 1991 and 1992, foreign investment has picked up again and, in 1995, reached the 1988 level. In 1995, the total outflow of foreign investment of all OECD countries amounted to \$265 billion. In spite of the rela-

Table 3.3 Foreign Direct Investment of the OEeD Countries

Year	Foreign Direct Investment (1981=100)	Foreign Direct Investment as a Percentage of OEeD GDP
1981	100	0.61
1982	55	0.33
1983	73	0.44
1984	100	0.58
1985	118	0.65
1986	186	0.83
1987	286	1.09
1988	341	1.23
1989	436	1.44
1990	455	1.37
1991	386	1.07
1992	345	0.87
1993	400	0.99
1994	409	0.95
1995	559	1.19

Source: OFCD (1993 and 1996b)

tively large amounts of money involved, we must conclude that the impact of foreign direct investment on the national economies - in terms of the share of GDP involved - still remains limited. The OEeD countries have set some steps on the road towards internationalization, but they cannot be considered internationalized or globalized in terms of foreign investment. Moreover, as far as the European Union is concerned, also with respect to foreign investment there appears to be a tendency towards regionalization (cf. Van Aarle 1996: 128-29).

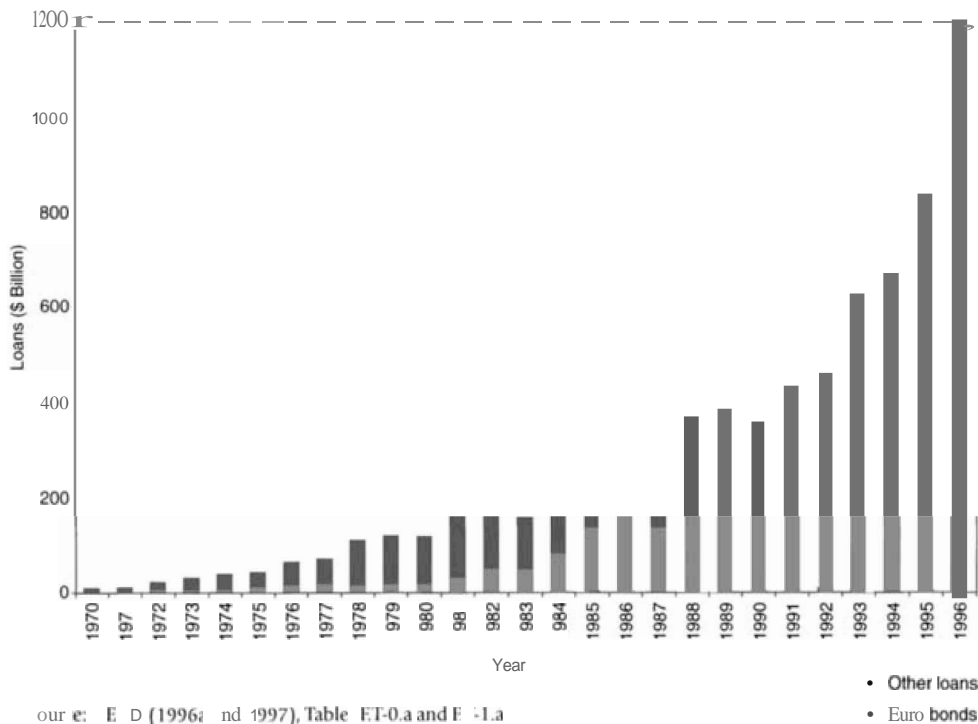
Other possible indicators of internationalization and globalization concern international financial flows. A first indicator is the total of loans on international capital markets. The data presented in Figure 3.4 show the spectacular growth of cross-border transactions that has taken place, especially in the 1990s.

There has been an increase in the quantity and variety of international financial flows to the extent that national financial markets have lost much

of their importance. The total of loans on international capital markets has increased from \$5.8 billion in 1970 to \$1055.6 billion in 1996. The demand for international loans soared during the 1990s: the total of loans outstanding in 1996 was three times that of 1990. A large part of loans on international capital markets takes the form of so-called *Euro bonds*. These are bonds that are issued simultaneously in at least two countries and are nominated in one or several foreign currencies - i.e. different from the ones of the home country of the buyers and sellers of the bonds (OEED 1996a: 280). As Scholte (1997) has argued, the issue of bonds in denominations other than the national currency leads to an effective loss of power of the national monetary authorities and may thus be interpreted as a sign of globalization.

A second indicator of international financial flows concerns the trading of so-called financial derivatives. Derivatives are financial products that are 'derived' from traditional financial products traded on money and capital markets; they consist of such diverse products as interest and currency con-

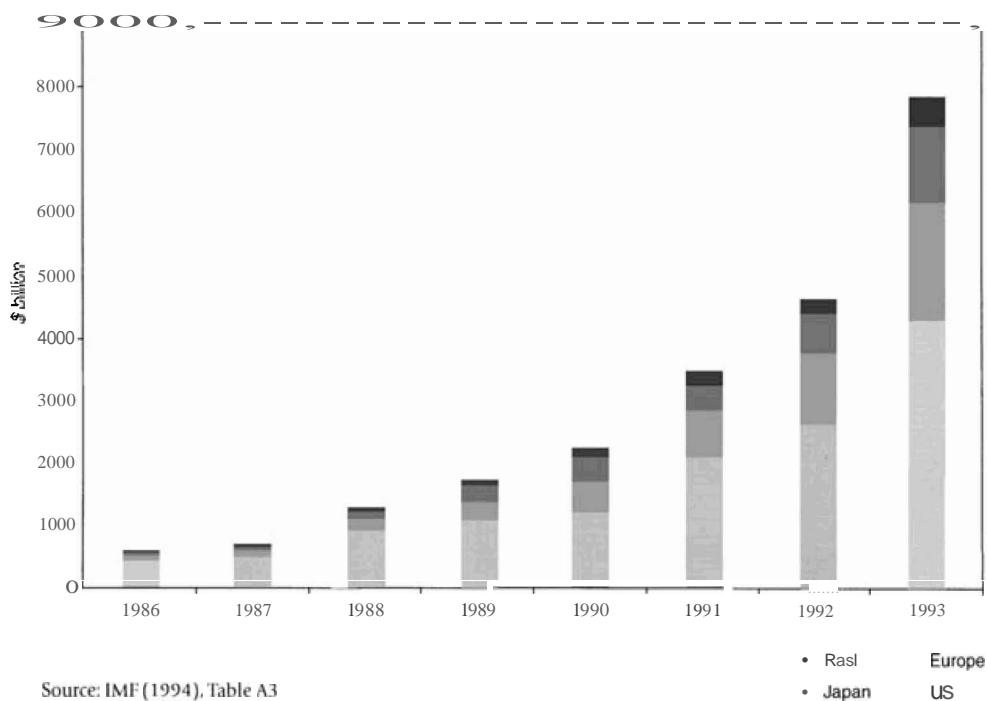
Figure 3.4: Total of Loans on International Capital Markets, 1970-1996



tracts and options. The common feature of all derivatives trading is that national financial authorities can barely keep track of the precise quantity and nature of values being traded. Figure 3.5 shows that the value of derivatives trading has increased enormously between 1986 and 1993. It also becomes clear from this Figure that trade in derivatives is most important in the United States, whose financial markets were liberalized relatively early. In Europe, where financial liberalization is a fairly recent phenomenon, derivatives trading has increased 140 times in the 1986-1993 period. In the same period, derivatives trade in Japan grew by almost 1800 per cent.

Our analyses indicate that contemporary international relations are characterized by a tendency towards internationalization. It would be a step too far, however, to interpret the contemporary global order as fully internationalized or globalized. Although the importance of cross-border transactions has clearly increased, contemporary international economic relations are still predominantly nationally based. The data on international financial flows show dear signs of globalization, in the sense that nowadays geo-

Figure 3.5: Trade in Financial Derivatives, 1986-1993



graphical distance and national borders have only a limited significance. National financial markets should be seen as parts of one large international financial marketplace, rather than separate entities. As a result of the revolution in information and communications technology, developments in one market are transferred to other markets almost without delay. Even so, instruments of governance are being created which can lead to the resurgence of the state in the area of international finance (cf. Kapstein 1994: 180).

4 The Limits of Theory: Predicting the Future

4.1 GADDIS AND THE FAILURE OF IR-THEORIES TO PREDICT THE END OF THE COLD WAR

In this Section we turn to the question of what, on the basis of our theoretical understanding of the international system and our empirical results, we can say about the future of the international system. Before we do so, however, we must deal with Gaddis's claim that the inability of the 'major theoretical approaches' of international relations to predict the 'peaceful' collapse of the Soviet empire at the beginning of the 1990s, demonstrated that 'one might as well have relied upon stargazers, readers of entrails, and other "pre-scientific" methods... clearly our theories were not up to the task of anticipating the most significant event in world politics since the end of World War II' (Gaddis 1992/3: 18). Gaddis's 'Theory and the End of the Cold War' was the first of an avalanche of articles in which mainstream IR-theory was castigated for its failure to predict the dramatic demise of the Soviet Union. As a result of Waltz's trenchant criticism in *Theory of International Politics* of the epistemological defects in the work of others, and his proud claim that, by contrast, he had learned his epistemological lessons well and accordingly had been able to develop a truly scientific systems theory of international relations, his version of structuralism in particular came under attack.

Although we agree with Gaddis that the suddenness and completeness of the Soviet collapse was a total surprise to 'almost' everyone, we think it only fair to point out that one of the most prominent 'cyclical evolutionists', Gilpin, in *War and Change in World Politics* (Gilpin 1983 [1981]) accounted for the possibility of the peaceful demise of a leading power. In Gilpin's view, 'throughout history the primary means of resolving the dis-

equilibrium between the structure of the international system and the redistribution of power has been war, more particularly, what we shall call hegemonic war' (*ibidem*: 197), but that, as a result of the establishment between the United States and the Soviet Union of a strategic relationship based on mutual assured destruction – one of the clearest manifestations of the rise of interaction capacity in the international system during the last decades, we may add - hegemonic war might be a thing of the past.

Gaddis's criticism is also unfair in another respect. In his view 'the role of theory has always been not just to account for the past or to explain the present but to provide at least a preview of what is to come. It follows, therefore, that one way to confirm the validity of theories is to see how successfully they perform *each* of the tasks expected of them' (Gaddis 1992/3: 10). In order to do so Gaddis then proceeded to develop 'a relatively easy test' (*ibidem*: 18) to establish the validity of the various theoretical approaches involved. He required of them to have specified beforehand '*at least one* of [the following five developments] as *likely*': (1) the asymmetrical outcome of the Cold War; (2) the peaceful collapse of the Soviet Union; (3) 'the increasing unworkability of command economies'; (4) the approximate timing of the relevant events; and (5) the rough outlines of a world without the Cold War. Not very surprisingly, Gaddis reached the conclusion that 'very few of our theoretical approaches... came anywhere close to forecasting *any* of these developments' (*ibidem*: 18; emphasis in original).

Gaddis justified his claim that 'good' theory must be able 'to forecast the future of the Cold War' with an appeal to the physicist Hawking. In the latter's view 'a theory is just a model of the universe, or a restricted part of it, and a set of rules that relates quantities in the model to observations we make... A theory is a good theory if it satisfies two requirements: It must accurately describe a large class of observations on the basis of a model that contains only a few arbitrary elements, and it must make definite predictions about the results of future observations' (Hawking 1988: 9). Hawking's 'definite predictions', however, are definitely of an entirely different kind from the ones Gaddis seems to have had in mind. First, because all scientific theories contain, as Hawking would be the first to admit, a *ceteris paribus* clause, which means that theories can be upheld even if the predicted events fail to happen (cf. Lakatos 1972 [1970]6 Second, because Hawking's predictions are predictions about some future events of which it is known in advance that they will take place, but this is precisely the kind of knowledge that almost always is lacking in a dynamic system like the international system!

Whenever it concerns dynamic or 'historic' systems, no theory can predict when a certain concrete event will take place. This is only possible if all kinds of accidental circumstances are taken into account about which the theory – and this goes for all theories' – cannot say anything in *advance*. It is simply impossible to know beforehand all the situations in which the theory will apply. Even Newton's theory of gravitation, perhaps the most successful empirical theory ever developed, cannot predict the moment that a leaf will fall from a tree or the trajectory of its fall. Both kinds of event can only be 'predicted' *ajierwards*, provided that it is possible to retrieve all the necessary information (this already poses a challenge in the case of the fall of the leaves of a single tree). The types of explanation theories can offer regarding such dynamic systems can be no more than 'explanations of the principle', as Hayek called them (cf. Hayek 1967: 3-42). We 'know' what the general mechanisms look like that play a role in these systems, but we do not know which outcomes these mechanisms will 'produce' in combination with certain specific circumstances, as the latter, in the words of Edmund Burke, 'are infinite, are infinitely combined' (quoted in Morgenthau 1965 [1946]: 220). To trot out the example of the falling leaf once more, it is thanks to the theory of gravitation that we know that every leaf on a tree will in due course fall to the ground. It is thanks to the biological theory of the growth and decay of leaves that we know that the probability of a certain leaf falling to the ground in the autumn is greater than at the beginning of summer. Nevertheless, it may happen that, as a result of a violent summer storm, the latter probability will be realized. Likewise, it is meteorological theory that tells us the possibility of such storms occurring cannot be excluded. However, it is impossible that this theory can tell us beforehand when and where this possibility will be realized.

4.2 THE FUTURE OF THE INTERNATIONAL SYSTEM

Against the background of our remarks on the possibility and impossibility of predicting future states of affairs in dynamic systems like the international system, we now turn to a discussion of the international system's future. In particular, we try to formulate an answer to the question of whether the recent changes in the distributional structure and the increase in the system's interaction capacity will lead to a 'systems change' (cf. Gilpin 1983 and Spruyt 1994): the destruction of the international system's deep structure. Will anarchy be replaced by hierarchy?

As far as the distributional structure of the system, and possible changes therein, is concerned, we have noted above that the United States is still the predominant power in the international system and that none of the other great powers in the 1990s has reached a level of power that is even comparable to that of the US. The first three columns of Table 3.4 below, drawn from a recent study by Maddison (1998) on China's economic performance, illustrate that, in 1995, China became the second-largest economy in the world. Its total GDP was about half that of the United States, but bigger than Japan's. In terms of population, China is by far the largest country in the world. The level of wealth in China, with a per capita GDP of \$2,653 in 1995, is only about one-tenth of that in the United States.

The last three columns of Table 3.4 give Maddison's calculations of the possible distribution of GDP among countries in 2015 on the basis of different growth expectations for several parts of the world. Maddison's results make clear that the international system is not heading for unipolarity - arguably the first step necessary for a systemic transformation from anarchy to hierarchy. The expected growth rate of the United States is expected to remain between 1.3 and 1.4 per cent per year, which represents a fall of 0.15 percentage point compared with the previous period, while the United States' share of World GDP is expected to decrease from about 21 per cent to about 17 per cent. As far as China is concerned, while its per capita GDP grew by 6.04 per cent per year between 1978 and 1995, it is expected that it will drop to a yearly average of around 4.5 per cent in the 1995-2015 period, because of the slowing down of labour input growth (Maddison 1998: 96-7; cf. also Krugman 1996). For Japan, Maddison also expects a growth rate of 1.3 to 1.4 per cent per year, which means a fall of 1.4 per cent in comparison to the previous period.

The figures in Table 3.4 demonstrate that the wealth gap between the 'Western' countries (Europe, the United States and also Japan) and countries in Asia will persist despite the much higher growth figures expected in China and the dynamic Asian countries. Even though Maddison expects economic growth in the latter two groups of countries to be much higher than in the Western countries, GDP per capita in the dynamic Asian countries will not increase to much more than 50 per cent of the wealthiest group of countries. China's per capita GDP, in Maddison's calculations, will remain at around 25 per cent of that of the advanced capitalist countries.

As we have noted above, the economic power base of countries is only one factor in explaining which countries will acquire a great power position.

Table 3.4 Levels of World Performance and Potential, 217 Countries, 1995 and 2015

	1995			2015		
	Per Capita GDP	Population	GDP	Per Capita GDP	Population	GDP
China	2,653	1,204.9	3,196	6,398	1,470.2	9,406
7 Dynamic Asia	6,236	350.1	2,183	12,408	444.4	5,514
India	1,568	916.5	1,437	3,120	1,210.3	3,776
31 Other Asia	1,445	543.7	786	2,147	776.8	1,668
Japan	11,720	125.6	2,476	25,533	130.7	3,337
United States	23,377	263.1	6,150	30,268	308.5	9,338
32 Advanced						
Capitalist	16,810	436.6	7,339	22,199	463.6	10,291
44 Latin America	5,031	489.0	2,460	6,776	645.7	4,375
15 former USSR	3,590	290.9	1,044	5,882	296.7	1,745
12 Eastern Europe	5,145	116.8	601	9,292	116.8	1,085
16 Middle East	4,138	211.9	877	5,049	333.8	1,686
56 Africa	1,220	715.2	873	1,489	1,172.0	1,745
217 World	5,194	5,664.0	29,421	7,323	7,369.4	53,966

Source: Maddison (1998), Table 4.1

Note: Population in millions at mid-year, per capita GDP in 1990 international dollars, GDP in billion 1990 international dollars

From Maddison's calculations, we can draw the conclusion that China, in the next century, is likely to possess the economic power base to become a great power in a military sense also. Although this is less clear at the present stage, we feel that China very probably will also be willing to use its economic power to that effect. Over the last decades, China has developed into a regional power in East Asia whose actions are being closely monitored by the other countries in the region (cf. Breslin 1999). As China's economic clout increases, and, concomitantly, its military might, the international system will see a return to bipolarity.

It is much less likely that the international system will change into a multipolar system. As we remarked above in Section 3.1, the European Union has the economic potential to become a great power. In terms of its GDP, the EU's economy is comparable to that of the United States. Many commenta-

tors have pointed to the lack of political unity among the EU member states, as well as the absence of a central locus of power as the main obstacles for the EU to become a great power on a par with the United States. Although the EC/EU has had a foreign-policy component since 1970 - first in the shape of the so-called European Political Cooperation, and, since the 1992 Maastricht Treaty, the Common Foreign and Security Policy - there has never been anything like an EU foreign policy taking precedence over the foreign policies of the member states. There has been even less progress in creating a truly unified military capability

The increase in the international system's interaction capacity, although considerable as far as international financial flows are concerned, also does not warrant the conclusion that the international system is on the brink of a systems change from anarchy to hierarchy. Internationalization is definitely on the increase, but its impact on the national economies will remain limited for the foreseeable future. Moreover, even if the present rise in the international system's interaction capacity were of the same magnitude as the one that took place from the eleventh to the thirteenth centuries, which eventually resulted in the transformation of the old order under the spiritual and secular authority of Pope and Emperor, not based on territory, into the Westphalian order based on territory, then there is still one, very vital, difference. At the end of the Middle Ages, as Spruyt has pointed out, there existed competing institutional solutions to the problem of political organization, such as city-leagues, city-states and sovereign, territorial states, of which the latter in the end proved to be the most successful (cf. Spruyt 1994). As far as we can see, however, at the present time there are no viable contenders to the state, that is to say, there do not exist institutional solutions which are at least as 'effective and efficient' as the state in dealing with the problems posed by the increase of interaction capacity. If we understand anything of the mechanisms that govern the international system, its deep structure will remain anarchic well into the twenty-first century. The international system is a dynamic system, though, and there is nothing in our theory of it that excludes the possibility of a systems change from anarchy to hierarchy. As far as predicting the future of dynamic systems is concerned, theory definitely has its uses but they remain limited indeed'

In view of Huber's famous definition of sovereignty, we suggest it would not be correct to argue that this internal functional similarity is a necessary consequence of sovereignty. According to Huber, who was arbiter in the island of Palmas case brought by the

Netherlands against the United States, 'territorial sovereignty.. involves the *exclusiue right to display the activities afa State'* (*Island of Palmas Case [Netherlands u. U.S.A.] 1928*; our emphasis). In our opinion this means that a state can entrust (farm out?) all 'the activities of a state' to other agents without this diminishing the state's sovereignty in any way.

- 2 Although we have to admit that those wishing to make a distinction between 'structure' on the one hand, and 'interaction' on the other hand, have a point in that certain parts of the system's structure can be influenced by the actors, while others cannot - for example because they are the consequence of prior interactions (cf. Archer 1995: 77-8). But in our view this is a difference of degree, not of principle. Both kinds of the structure function as boundary conditions. With reference to the ongoing discussion within IR-literature on the exact nature of these boundary conditions (e.g. Wendt 1992 and Ruggie 1998), we may add that boundary conditions 'enable' or 'empower', as well as 'constrain' the interacting units. We may even go further: if boundary conditions would not 'constrain' the units, then there is no way that they could 'empower' them (cf. Lieshout 1995: 7-15).
- 3 We have decided not to use composite power indices (such as the widely lused index introduced by Singer *et al.* 1974) because we feel that these have some important methodological disadvantages if one tries to make comparisons through time (cf. Organski and Kugler 1980: 36). Organski and Kugler argue that 'a GNP index is evidently more parsimonious from the user's point of view' than the composite Singer-Bremer-Stuckey index, the more so, as the performance of both indices does not differ very much (*ibidem*: 38). Our focus on COP shares and nuclear weapons at least has the advantage of providing intuitively clear interpretations.
- 4 Of course, inclusion of the sum of COPs of the member states of the European Communities/Union would produce a different result. It is the lack of *political* unity and identity of the EC/EU that made us decide not to include this *economically* very powerful bloc in the analysis at this point.
- 5 Note that we use the terms globalization and internationalization in a different way from Ilirst and Thompson (1996: 10). In their view, '[a] *globalized economy* is an ideal type distinct from that of the inter-national economy and can be developed by contrast with it. In such a global system distinct national economies are subsumed and rearticulated into the system by international processes and transactions. The inter-national economy, on the contrary, is one in which international phenomena are outcomes that emerge from the distinct and differential performance of the national economies. The inter-national economy is an aggregate of nationally located functions.' As one of us has remarked elsewhere, conceptualizing globalization in such extreme terms means that it is very unlikely that the present-day international order can be understood as a globalized economy (cf. Ilout 1997: 102).

- 6 For this reason, it is actually the other way around. Scientific honesty requires that 'anyone who advocates the empirical-scientific character of a theory... must be able to specify under what conditions he would be prepared to regard it as falsified; i.e., he should be able to describe at least some potential falsifiers' (Popper 1983: xxi). This is a point Waltz entirely overlooks in his recent defence of his theory of the balance of power. On the basis of Lakatos's treatment of the *ceteris paribus* clause, Waltz argues that 'falsification is untenable' (Waltz 1997: 914). But he fails to see that Lakatos, following Popper, insists that falsification remains the regulating principle of the empirical-scientific enterprise. According to Waltz the theory predicts no more than that 'willy, nilly, balances will form over time', and that 'balances recurrently form. The theory cannot say how long the process will take' (*ibidem*: 915 and 916). This implies that it is not possible to refute the theory. Whatever behaviour the units in the international system exhibit, it always agrees with the theory. At the end of his essay, Waltz shows himself to be very satisfied with his theory of the balance of power. According to him it has stood the 'test of seriousness' (*ibidem*: 916). We sincerely doubt the validity of this test.