Introduction to Transition

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Spring 2007

1 Economics of Transition

The demise of communism in Central and Eastern Europe ushered in a new phenomenon in economics, transition. This is an unprecedented process as no economy has ever moved from a comprehensively controlled economy to a market economy, although many have traversed the reverse path. It is rather easy to get a general idea of what this was to involve — privatize, create a functioning legal system, liberalize prices and wages — it is much harder once we have to get down to specifics. A lot of thought went into the transition from capitalism to socialism, not all of it of value, but little about the reverse course, for until the end of the 1980's nobody thought this was going to happen. Or as *The Economist* put it: "Hundreds of books have been written on the transition from capitalism to communism but not the other way. There is no known recipe for unmaking an omelette" (March 24-30, 1990: 22).

Conquest recognizes the difficulty, but the metaphor is incorrect:

"It is not as if a country can, as it were, be put in dry dock and equipped with new institutions in a careful and considered way.

¹One reason why is that the success of many of these changes requires the implementation of others. This *interdependence* is one of the great complicating factors of transition. This leads to the wish to be able to do it all at once, in a big bang.

The whole venture is more like trying to reequip a ship at sea, in stormy waters, with a new engine" [2, 191].

This metaphor misses an important point because it has the institutions replaced still in one fell swoop, but it is good because it explains that time does not sit still for the reformers, and that the key problem is the difficult environment in which the new institutions must take root. But this process is much more like changing the engines on a plane that is in flight. And not just the same engines but new ones: taking out the propellers and putting in jet engines. You need to strengthen the whole ship to keep it viable. Can this not be an interesting subject?

We are now more than ten years into transition. It started in CE in 1989 and in the FSU we are at the ten-year anniversary. Bulgaria and Romania have joined the European Union, joining the Baltic States, Slovenia, Slovakia, Poland and the Czech Republic. With a decade and a half of experience it is time to draw lessons. But is transition over? When will it end? How do we know when it is over?²

The focus of this course is on the experience of economies in transition and the problems encountered. The subject is interesting, in great part, due to the puzzles that have been encountered. For example, economics would predict that removing the inefficient distortions of central planning should lead to an increase in output. Yet, all transition economies have experienced large falls in output. And we would certainly expect that privatization would lead to increased efficiency but this effect is very hard to find. Indeed, if you look at aggregate data it appears that Belarus and Uzbekistan are among the best performing economies in the FSU, yet they have had the least serious reform. Is the Washington Consensus just wrong? And while economies that have junked communism have struggled, China – which remains nominally Communist – has thrived. What explains these differences?

²I actually have a precise answer to this question but it is better not to offer it just now.

One thing is certain: transition is not the simple process that some people envisioned.

In order to understand this experience we will have to develop a theoretical understanding of what the creation of a market economy implies, but our main focus will be on the empirical record of transition. One lesson that will become apparent is the need to examine the historical legacy and political environment in which transition takes place. Our geographic focus will be the countries of Central Europe and the former Soviet Union. We will also examine the experience of China.

2 Transition versus Comparative Economic Systems

Transition economics is the successor to comparative economic systems. The latter used to study how different economic systems operated and compared their performance. Socialism versus capitalism was the great organizing principle. With the demise of socialism we are left with transition.

Does this mean that the scientific development is only negative? No. We lost static comparison, but now we study a dynamic process of institutional evolution.

The study of comparative economic systems was much like economic pathology. We studied how economic systems that were "sick" operated.

• What happens to the economic system when its nervous system is seriously distorted?

Economics of Transition is then the study of therapy:

• how does an economic system suffering from such pathology recover? It is the study of restoring the health of an economic system.³

³Put here the replacing the engine metaphor.

Notice that development economics is different. It is closer to human growth. The changes that take place coincide with maturity. In transition we are analyzing how one system transforms into another – the road back from a wrong path taken.

Now because it was a path, the system evolved along those lines for various periods of time, up to 70 years in the Soviet case. What does it mean to evolve along those lines? It means developing Soviet-type institutions and Soviet-type structural legacies. Examples of the latter include hypermilitarization, location policies, environmental legacies. Institutional development refers to the institutions that support command planning, and institutions that support performance in spite of command planning.⁴

This means that the study of economic therapy not only requires us to understand how to cope with stunted growth – the structural legacies – but also how robust are these institutions. This also suggests we need to understand what institutions are needed to become market economies. One might assume we could learn the latter from studying market economies, but this is not at all easy. After all, in studying market economies it is very difficult to learn what institutions are necessary and which are incidental to market formation. A comparative perspective is needed for this.

2.0.1 Comparative Morphology

It turns out that there is still another way to think about economies in transition. Comparative morphology is needed to think about why some economies do not improve. The Tolstoy axiom about marriage is apropos—"Happy families are all alike; every unhappy family is unhappy in its own way." At least for economists, success in economic development is pretty well understood. Failure, however, is characterized by great diversity.

Consider Argentina. Endowed with resources, relatively educated labor force, immigration and high capital inflows at the turn of the century it was

⁴These are the more robust institutions after all.

set for prosperity. In 1913 Argentina's GDP per-capita was 80% of the OECD average. By 1987 it was 32%. Argentina is clearly a case of success foregone. And Argentina was not as distorted as command economies were.

Thus what we want to understand is why it is so difficult to correct the pathologies we observe. Why are they so persistent? This is because they are efficient in their own way, but we need to understand the system to understand why.

Of course to do therapy it is necessary to understand what is the most critical problem. A catalog of problems is not sufficient. We need to understand what is the critical illness – the critical defect that must be overcome.

The irony is that the prescriptions for therapy had to precede the accumulation of knowledge. Hence, some puzzles. Some more difficult than others.

- 1. The Output Fall
 - (a) The Uzbek Growth Puzzle
- 2. Returns to human capital
- 3. Re-demonetization
- 4. Value destroying activities are retained
 - (a) Difficulty of eliminating soft-budget constraints
- 5. Geography matters
 - (a) The Great Divide
 - (b) Privatization and efficiency

3 Why Study Transition?

Many might argue that we need not bother. All you have to do is end central planning, privatize, and you get a market economy. There is no special economic issue to consider. These countries did not have markets; once they have them they will be market economics and normal economic analysis will apply. Perhaps it is economic history, but there is no interesting economics at work here.

Such an optimistic view might have been more plausible at the start of transition. In 1998 Russia imploded – the ruble collapsed and the effects spilled over to the rest of the CIS. Now Russia has recovered due to high oil prices, but many puzzles remain. Moreover, the transition experience has been very uneven. Why? Need to explain this. Mexico and many other places – suggests that transition may not be all that straightforward. Transition seems to be a process that is nothing if not complex, and success seems in no way to be assured.

3.1 Development, Transition and Evolution

The compelling issue of transition economics is that simply removing distortions and impediments to markets does not accomplish the task of economic renewal. Indeed, the apparent fall in output suggests that there is a friction to this process that was not anticipated. Whether or not the fall in output is measured correctly what is clear is that old activities are replaced in transition by very different ones. Transition is very different from development.⁵ The contrast is a useful starting point for thinking about evolutionary ideas.

Development is the process of turning a less complex organism into a more complex one. One can think of the process of turning a child into an adult. Notice that process is, to a large degree pre-programmed at conception. Over time complexity increases, but the instructions for this process and the full

⁵See [?] for a detailed analysis.

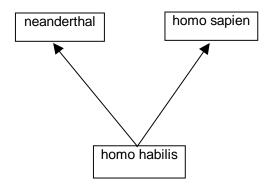


Figure 1: Schematic of Human Evolution

model are "known" at its start. Transition is very different. It can be likened to changing the organism from one type to another.⁶ The best analogy perhaps is with human evolution.

To make this analogy more compelling consider an evolutionary path. We can consider the pre-industrial revolution economy to be a pre-cursor to homo sapiens. Consider figure 1 which gives a schematic of human evolution. Neanderthal and homo sapiens share a common ancestor, homo habilis. Notice that Neanderthals and homo sapiens share many common features. We know that the DNA must be very similar, given how much of the genetic code is shared between humans and fruit flies. Moreover, they both represent progress – in a well-defined sense – over homo habilis. It turned out, however, that Neanderthal was an evolutionary dead end. It did not have to be the case – it was not predetermined – but it ended up that way. Notice that the species became extinct – it did not, could not, jump from the one

⁶Notice why the child-adult example is a poor analogy for transition. The child is programmed to become an adult. All the instructions are in the DNA of the child. It is a matter of growth, but there is no uncertainty. But economic development is not programmed. The industrial revolution was not programmed into the rules of the preindustrial society. With economic development there is evolution, but this involves random shocks. Hence, a more proper analogy is to the evolution of species rather than child development.

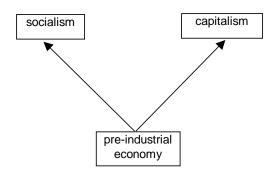


Figure 2: Schematic of Economic System Evolution

path to the other; Neanderthals were a dead-end.⁷

Now consider the evolutionary path of economic systems, in figure 2. The socialist economy shares with capitalism a common ancestry, pre-industrial society. Underdeveloped countries do as well. Indeed underdeveloped countries ought to be thought of as still of this ancestor. But socialist economies represent not a precursor but the alternative evolutionary path – the Neanderthals.⁸ Evolution along a different trajectory. Transition is thus the process of jumping from this dead-end – Neanderthals would be generous – to the "successful" path. Transition is the process of accomplishing this jump. This is possible because we humans can alter policies – unlike DNA, for now – but it is unexplored until the transition.

⁷This is not to say that the path was fatally flawed. The Neanderthals did have large cranial capacity. But they were wiped out by homo sapiens. The demise of the Neanderthals was due to competition with another species. This is important for thinking of socialism. After all, the problem for socialist economies was precisely the competition from capitalism, especially as globalization proceeded. The more in contact with capitalist economies that the socialist economies came, the greater the threat. Had socialist economies been able to wall themselves off completely from the capitalist world the system may have muddled on for many more years, especially in the resource wealthy Soviet Union.

⁸It is certainly stretching this analogy way too far to note that some recent anthropologists suggest that neanderthals became extinct because they refused to migrate, and hence, did not adopt technologies that are associated with migratory behavior. In other words, they were less able to adopt new technologies.

Human evolution viewed by anthropologists examines the fossil record. Anthropologists compare the ideal types of Neanderthal and homo sapiens. But notice that early in the divergence between Neanderthal and homo sapiens the difference was smaller. We do not know if some "early" Neanderthals jumped to the "correct" path. This analogy holds even stronger for socialist economies. This suggests that the difficulty of transition will depend on how far along the "mistaken" path an economy traversed. This will be smaller for Vietnam or China than for Russia. How else to think about the much larger rural sector in China than Russia – it is clearly a way in which it more resembles a pre-industrial society. Russia is the fully developed Neanderthal, while China is much closer to the fork in the development road. It is critical to recognize this in order to understand the empirical record of transition.

The question is how can we operationalize differences in the evolutionary path? That is, how far is Russia from capitalism compared with Poland? This requires some understanding of the evolutionary path under socialism and the institutions that were developed.

Transforming an economy from plan to market is an unprecedented historical event. The development of market economies in the industrialized countries was a process that took centuries. This was a gradual process, unguided by any plan or goal for the end result. Transition, on the other hand, represents an attempt to transform an economy in a conscious fashion. Transition thus involves the study of the *creation* of markets; hence, it should be of interest to all economists. Transition is thus a social experiment, and we are fortunate enough to be witnesses to it. We could rightly say that this is the second great social experiment in economic history; and in the

⁹Notice that examining the fossil record is likely to produce comparisons of the types at their most distant state. Fossil types are easier to identify the farther along they proceeded on the separate path. Moreover, fossils are more likely to be discovered that died in a cataclysm than in the normal process of life.

¹⁰Anthropologists do believe that neanderthals and homo sapiens were similar enough to inter-breed. But there is no evidence that they did, at least in their more evolved forms.

history of this century.¹¹ It is thus tells us something about the ability of policy to drive economic processes. It may also turn out to be a measure of our understanding of the conditions needed to support a market economy; if it turns out that the policies suggested by economic analysis are insufficient to make the market take root, this would tell us about the deficiencies of economic analysis. A key question is then whether it is possible to design and implement a blueprint for transition. It is thus worth studying for this alone.

Transition is also interesting to study from the perspective of development economics. Typically development economics studies the experiences of poor countries; poor in a particular way. Not just low per-capita income, but underdeveloped. Most transition countries (with exceptions, notably China and Vietnam) are relatively poor, but they are already industrialized, urbanized, and have educated work forces. Underdeveloped countries do not. The experience of countries in transition is thus informative about a key question of development economics: the importance of institutions to development. If transition were relatively costless and painless, then one could argue that institutions are not important to economic development. Why? Because institutions are precisely what transition economies lack. Transition economies have already experienced the rural-urban transition, with large shifts of workers from agriculture to industry. They typically have large manufacturing sectors; often very large when we control for per-capita income. What is lacking in these economies are the institutions common to DC's. The fact that the transition to a market economy is rocky suggests that developing these institutions is tricky. This suggests that institutional gaps may be the key problem that faces developing countries, rather than lack of resources. And it thus suggests that problems of developing countries and transition economies may not be all that different.

Transition, in fact, studies the route back. The socialist period was a

¹¹Socialism, and the development of the Soviet-type economy, obviously being the first.

detour on the road to economic development. A highway to no where. The highway ends with the demise of communism. Now these economies seek to get back to the development road. But they have detoured. They are not where they were before communism – not just rural-urban transition, but heavy industry, literacy, semi-modern health and welfare system. To get back to the development path requires an off-road vehicle. How bumpy this path will be depends on how extensive was the detour, and how critical are the missing institutional features of the market system – which is the height of the bush in this metaphor.

3.2 Politics and Transition

The economics of transition is also an important topic because of its political importance. The end of communism is a political, as well as an economic transformation. The collapse of communism led to political transformations as democracies replaced totalitarian political systems. Developing democracy, is thus as important in many countries as the creation of markets. One important question then is how compatible are these two goals. Of course, for democracies to survive it is important that economic performance improve. This may require reforms that produce pain before the economy improves. The people of the former communist lands are rather impatient for improved performance, however, and if the transition proves too difficult it may be democracy that suffers. But the length of the transition may not be a policy choice that can be set and fine tuned: as some have noted, "it is a lot easier to burn down a forest than to plant a new one."

Transition economics seems to suggest that politics plays a crucial role. There are political constraints on the process that are crucial to understanding what happens. This suggests that politics is an important element in transition. This is a bit disheartening for economists, of course. But politics and history present many of the constraints that policies must satisfy. Sometimes it turns out that changes in the political sphere have crucial im-

pact on the economic situation. A good example, that we will return to later, is Hungarian privatization. It had appeared to most economists to be a fact that Hungarian-style privatization created real owners but was very slow compared with mass privatization. Until 1995 all evidence supported this view. But after the Hungarian government changed privatization accelerated to the point that Hungary and the Czech Republic now have almost the same share of industry privatized. All this suggests that we have to be broader in studying the transition than we normally are in economics.

4 The Nature of Transition

4.1 The Evolutionary View

Transition is also interesting because of the pace of institutional and structural change that is taking place. Processes that took centuries in the west are taking place at breakneck speed in the former socialist countries. This allows economists to study the evolution of markets in real time. The comprehensive nature of these changes makes this more exciting but also is the source of the major analytic hurdle to the field. With so many changes taking place simultaneously, it is often argued, it is hard to analyze these processes with the economist's normal tools. Conventional economic analysis focuses on the comparative statics of equilibrium states. Transition, however, is primarily concerned with the path taken between states.¹²

The real difficulty with using economic analysis in transition is the degree of flux in the institutional environment. In conventional economic analysis the institutional environment is taken for granted. We assume the existence of well-defined property rights, of an effective financial system, and a functioning legal system. In conventional analysis we do not even think about the institutional environment, precisely because of its existence. But in transi-

¹²Distributional concerns are another crucial question for transition economics, and this is another area where conventional economics is rather weak.

tion economies it is precisely the absence of these market institutions that is at the heart of the phenomenon. In transition property rights are ill-defined, the financial system is underdeveloped or non-existent, the legal system is ineffective. This means we must think about economic behavior when such institutions are missing. This is very difficult, especially when we think about ill-defined property rights; ownership is at the heart of a market economy.

Yet although economic analysis is not all that well-suited for this endeavor this is no argument for jettisoning it. Economic analysis is still useful, for without an organizing framework for analysis we are like ships lost at sea, moving along with no plan and no objective course. The difficulty is to incorporate knowledge of the institutional environment into economic analysis. This means that the study of transition, by testing our analytical methods, can help develop economic analysis.

The Economics of Transition can be thought of as a laboratory for economic development. It is a great experiment in the role of economic institutions versus resources. If we think of transition and development economics the contrast is apparent. The problem of economic development is to transform poor, primarily rural, economies, into urban industrialized countries.. Compared to developed economies the primary problem is lack of resources and lack of know-how. But the process is essentially one of shifting resources (physical and human) from the traditional sector to the modern sector. In transition economies, on the other hand, the problem is different. In transition economies an urban industrialized sector already exists. Indeed, one of the primary problems of transition is that these economies inherit industrial sectors that are over-built.¹³ In transition economies a critical problem is to shift resources out of industry, especially those parts of industry that are not competitive in a market environment.

The more pressing problem of transition is *institutional* development.

¹³The noteworthy exception here is China, which is still quite rural [cite from Sachs and Woo]. It is important to keep this in mind when we discuss the Chinese model.

Creating a market economy means creating the institutions necessary to make markets function. A legal system is one of those institutions, and the financial system is another. Perhaps the most important of all is private property. In market economies *market institutions* develop to support decentralized economic activity. In a STE there is division of labor, but centralized planning institutions coordinate activity. Thus a central feature of transition is to *build* market-institutions. This is clearly one of the reasons why history matters for transition.¹⁵

While most people agree on the need for institutional development, there is much less agreement on the question of how this can be promoted. Some argue that institutional development must arise from below. That is, the supply of institutions is created by the demand; it is a bottom-up phenomenon. This is argued especially strongly by those who emphasize particular cultural and historical factors. The problem with this approach, as policy, is that the success of transition depends on the rapid development of these institutions.

4.2 The Importance of the Historical Legacy

The economics of transition differs from much of economic theory because of the importance of history. We are, after all, studying transition from a particular system. The historical legacy is crucial. When transition started some observers argued that this would be a simple process; liberalize prices and allow private property and the region will boom. It turns out, however, that the legacies of the prior system constrain transition. The most important

¹⁴This is not to deny the existence of markets in planned economies, most notably the Second Economy. But the primary means of coordination were centrally organized, and it is there absence, before their replacement by market institutions that complicates transition.

¹⁵History matters not only because these economies lack these institutions, but also because history may affect the *development* of institutions. An appropriate analogy may be the immune system and how it affects the success of a transplant. The success of the transplant depends on whether the immune system rejects the foreign organism.

of these legacies is an industrial structure designed for a command economy; one that is dominated by large industrial enterprises that are destructive of value (i.e., produce negative value added). Running a close second is the absence of property rights in the old system, leading today to widespread ill-defined property rights. The combination of these two factors implies that resources are misallocated, and that the collections of factors that we call firms are rather stuck as well. If property rights are ill-defined, it is hard to move resources around in a market economy.

Historical legacies may be so important for subsequent developments that there is path dependence. This is the notion that the equilibrium depends on the path followed. Path dependence, or hysteresis, exists when there are multiple equilibria, and fundamentals are insufficient to determine where the economy will end up. When equilibria are unique we only have to worry about the fundamentals of a situation to understand where the economy will end up. When there is hysteresis, on the other hand, we must worry about the path as well. A good example of path dependence is Silicon Valley. There is no fundamental reason why the computer industry should have ended up there, as opposed to many other regions. But once it got started, it made sense for new firms to locate there because of the abundance of trained personnel. The argument might be that if Russia gives up its heavy industry in the transition it could end up as a raw material exporter and nothing else. This means that impact effects of transition policies are of even greater importance.

Transition economies share a particular historical legacy. These economies have escaped from a particular political-economic system. Whether in Central Europe, the FSU, Mongolia, or even Vietnam, countries in transition are products of the Soviet economic system. Not only were these countries, in general, part of the same political bloc, but they also shared the same economic model.¹⁶ This does not mean that these economies were identical;

¹⁶The countries of the former Yugoslavia are clearly an exception. Not only did Tito take Yugoslavia out of the Soviet bloc, but the imposition of the labor-management system meant that Yugoslavia had its own particular brand of socialism. In particular Yugoslavia

Poland did not collectivize agriculture, and Hungary implemented the New Economic Mechanism. But there was a common logic to these economies, and without a thorough understanding of this logic we will not be able to understand transition.

Sharing the same legacy, these economies also undertake transition at the same historical moment. This greatly complicates the process of transition, which would be difficult enough if only one country was undertaking it. Instead, a group of countries that had interlocking economies are simultaneously experiencing transition. This means that external shocks are an important feature of the transition environment. For the Eastern European economies the transition coincided with the breakup of the CMEA. This forced the emerging market economies to develop in a more competitive external environment without the cushioning effect of the "common socialist market."

For the FSU the shock is greater by an order of magnitude. The fifteen countries that emerged from the Soviet Union were part of a single integrated economy. What were domestic relations between regions of a single economy now became part of international trade. If the shock that fell on Eastern European economies can be likened to a natural disaster like an earthquake, the shock experienced in the FSU is that plus divorce. The problems of dividing up common institutions and common property were costly enough, but the costs of breaking up economic relations between enterprises was even higher. To give one example, in Eastern Europe each country had its own currency, but the former republics of the Soviet Union all used the Soviet ruble.¹⁷ The cost of separation was all the more significant because of the centralized nature of the Soviet economy, organized on ministerial lines centered in Moscow.

was much less centrally planned. This affords us the opportunity to see how important was socialized property relative to central planning as an inhibiting legacy for transition countries.

¹⁷The path to new currencies was hardly a smooth road. See [3].

Although transition economies share a common legacy, there are important differences to note. First, we must recall that there have been two waves of transition. In Eastern Europe transition began with the fall of the Berlin Wall in 1989. The Polish Big Bang took place in January of 1990. The breakup of the Soviet Union occurs two years later, and price liberalization does not take place in Russia until January 1992.

The second, and more important, point to recall is that these countries differ in the length of time they were "Sovietized." Eastern European economies adopted the Soviet system only after WW2, while most of the former Soviet republics endured the system for some 70 years.¹⁸ The exception, of course, are the Baltic States, and it is not a surprise that they have had the most successful transition of any former Soviet republic.¹⁹ An important hypothesis about transition is that the difficulty of the process is directly related to the length of time a country was an STE.

It is useful to look at some characteristics of countries in transition. First, it is important to remember the extent to which these countries were dominated by state ownership prior to transition. Some perspective on this is obtained from figure 1, where we can see that for most of the countries of the FSU the private sector share of GDP was less than 10%. It is slightly higher for some Eastern European economies, but still less than 20%. In table 1 we can see some socioeconomic indicators of these countries. One interesting feature of the table is the decline in life expectancy for Russia and the Ukraine. Another interesting feature is the high level of secondary

¹⁸One might also note that the Soviet system was *imposed* on the economies of Eastern Europe, while it was indigenous to the Soviet Union. When communism fell this led to a wave of national re-awakening in Eastern Europe (and the return of the geographical identifier, Central Europe). To many in the former Soviet Union, however, there was a sense of loss of an empire. Besides this, the Soviet system naturally took deeper roots in the Soviet Union than in Eastern Europe, thus it should not surprise that greater effort is needed to overcome the legacy.

¹⁹This may be due to other factors besides the length of time a country was in the Soviet Union. The Baltic States lay farther to the West, and this geographical factor seems to explain a good deal of transition experience.

school enrollment; unlike developing countries, transition economies invested rather highly in education.

A critical feature of the transition is apparent from figure 2; the decline in output. This seems to be a general feature of transition; we will have to ask why. Notice that even in Poland output has not yet returned to the 1989 level. As we shall see, these output declines are probably overstated; in some cases rather severely. Still, when compared with the output fall in the Great Depression in the United States or in the Soviet Union during WW2, we see that the output fall is an important factor that we must deal with. Finally, we observe, in table 2, the significant increase in inflation that accompanied liberalization in transition economies. In some cases inflation rates increased to hyperinflationary levels, while in others merely high inflation (above 40% per year) were reached.

Thus we see that a severe decline in output accompanied by high inflation is a characteristic feature of transition. This has made transition a much more complex process, since the macroeconomic problems deflect attention from the fundamental questions of institutional development and restructuring.

5 Studying Transition

How then do we go about studying the economics of transition? There are several elements. First, we must examine the historical legacy. The reasons for this should now be clear. We want to learn the logic of the previous system, and the legacies that affect the transition process. One important feature of this will be an examination of why it was so difficult to reform a STE.

A second element of our study will be a comparative focus. This is a means of exploiting the evidence we have from many countries undergoing transition, some 25 (Bulgaria, Belarus, Czech Republic, Croatia, Slovakia, Estonia, Poland, Hungary, Lithuania, Latvia, Georgia, Romania, Mongo-

lia, Slovenia, Macedonia, Russia, Ukraine, Kirghizia, Kazakhstan, Armenia, Azerbaijain, Vietnam, Tadjikistan, Turkmenistan, and Moldova), not even counting the former GDR.

Our list of countries in transition does not include China, and that is worth comment. China is often pointed to as a model for transition. Many argue that the Chinese transition is more successful than in EEFSU. China has experienced rapid economic growth since 1978, without the disruptions observed in the EEFSU. China has managed to avoid high inflation, and it did not suffer a decline in output, as countries in the EEFSU did. This is often taken as an argument for gradualism over shock therapy. As we shall see these terms are thrown around without much precision and with less care for empirical evidence. But China is a huge country, and its success at economic reform warrants analysis. We must ask why China has been successful, and whether this experience is transferable.

5.1 Transition Dichotomies

Discussion about transition often focuses on dichotomies. The most important one is that between the so-called "shock therapy" and "gradual" approaches. This is a question about the *pace* of transition. Should the economy be transformed rapidly, or should there be a more gradual adjustment to the new system.²⁰ Often this debate focuses on issues such as liberalization or privatization: should prices be freed on all goods on day one of transition? should enterprises be privatized in a mass program, or should they be sold off gradually? This is perhaps the most controversial issue in the whole area of reform.

The competing principles are easy to understand. The need for a big bang seems almost implied by the lessons from partial reform. Moreover, there is a question of how much of the infrastructure of a market economy

²⁰The problem with this debate is that each side seems to create a straw man for the other side. An interesting debate on this subject is given in [1] and [5].

is needed for markets to be effective. The alternative view is motivated by the recognition that one cannot do all at once. There are limited skills and limited amounts of time. The question is then what is most important, and what is irreversible.

Related to the pace of transition is the question of sequencing. This refers to the order in which reforms should be introduced. The fundamental question is really whether all reforms must be implemented simultaneously, or whether there are certain reforms that must precede others.²¹ The question is thus one of how comprehensive must the reform program be. Those that argue for rapid, comprehensive transformation, point out that it is better to minimize the duration of the inevitable pain. As Vaclav Havel has pointed out, "it is impossible to cross a chasm in two leaps." Others point to China as a case where partial reforms have been more successful than the more comprehensive reforms undertaken elsewhere.

Gradual versus Big Bang differs from partial versus comprehensive reform. Partial versus comprehensive reform refers to the question of how complete reform will be; is there a commitment to move towards a private property, market-oriented economy? This now is rather settled as an issue, but at one time it was the question. Gradual versus big bang refers to the timing of the moves required to move to the market. Even gradual reform is comprehensive. The notion of gradual reform implies that there is a proper sequence in which reforms must be implemented. Some reforms must be first, whereas the notion of big bang is that all, or at least several, components, must be implemented at once.

One of the key arguments in favor of a *big bang* approach is that the window of opportunity for reform must be exploited. The argument is that in the initial phases of transition there is a political vacuum that creates a

²¹Some argue, for example, that legal reform must precede privatization, so that private firms emerge in an environment with the rule of law in place. Others, however, note that it is the emergence of private interests that creates the *demand* for law. See, for example, [4].

window of opportunity for radical reform.²² As time passes normal politics will resume, and interest groups will form to block reform.²³ Hence the time for radical reform is in the beginning of the process. One can point to the resurgence of former-communist parties in the EEFSU as evidence that the political popularity of radical reform may be short-lived. Yet one may also interpret this resurgence not as some inevitable process, but rather as a response to the reforms that have been implemented.

5.2 Transition Questions

A number of interesting questions about transition are worth posing now, in order to focus the subsequent discussion. These are broad questions that help us think about the issues we will be discussing. Some of these questions are related to the initial challenges of transition. Others relate to the longer-term tasks that must be fulfilled.

- 1. Do differences in transition outcomes reflect primarily reform strategies, or do they reflect initial conditions, such as history, the level of economic development, political factors, and other country-specific factors?
 - Related to this is the question of what determines the reform strategies that are chosen: are they primarily due to initial conditions, or to the political choices of the various leaderships?

²²This argument was made forcefully by Balcerowicz.

 $^{^{23}}$ The argument of Mancur Olson about the role of interest groups in economic growth is relevant here.

Olson argues that over time interest groups form (if they can solve collective action problems) and make claims on government. These claims over distribution tends to slow growth. The economy becomes sclerotic as many interest groups must be paid off to accept any change in their status (hence, it is especially inimical to innovation). After severe social dislocation (e.g., Japan and Germany after WW2) these interest groups are destroyed, and the anti-growth effects of their claims eliminated. As society develops, however, new groups form, and their claims leads to sclerotic growth.

- 2. Is it necessary to begin with liberalization and stabilization?
 - Does faster liberalization lead to faster recovery?
 - Or are these detours that delay fundamental structural changes such as the development of the rule of law and enterprise restructuring?
- 3. How crucial is privatization to marketization?
 - Is it necessary to privatize to create markets, or can markets be introduced without the conversion of state property?
 - In other words, how crucial are private property rights?
 - Does the method of privatization matter?
 - Does restructuring necessarily result from privatization?
- 4. Does transition require that a gulf emerge between winners and losers?
 - What has happened to poverty and health during transition?
 - Can social policies be designed to reduce the pain of transformation that does not, at the same time, impede the process?
- 5. Is there only one path that the transition can take? Or are there alternatives to the Washington consensus?
- 6. How long will the transition last?

This is hardly an exhaustive list. More questions will emerge as we move deeper into the discussion. It will be useful to keep these in mind as we proceed.

6 Appendix: Evolution

This causes some to suggest that an *evolutionary* approach is more appropriate to transition.²⁴ An evolutionary approach dispenses with the notion of equilibrium, focusing instead on process. This perspective has the important value of emphasizing the legacies of the prior system. It also leads to the important observation that organizations display inertia.

The essential insight of the evolutionary view is that organizations solve coordination problems through routines. Using routines eliminates the necessity to optimize at each moment in time, and it economizes on information in a world of uncertainty.²⁵ As solutions to coordination problems, routines also are an element in the solution to incentive problems within the organization. Hence, "a routine is essentially one equilibrium of the complex non-cooperative game that is at the heart of efficient organizational design" [6, 39]. If there are multiple solutions to these coordination games then it may be very costly to search for them. Perpetuation of organizational routine may thus be a means of protecting against the conflict that would arise in any attempt to find alternative solutions to the game. This creates inertia within organizations. Not petrification, but organizational stability.

If organizational routines are subject to inertia, what accounts for the dynamics of society? In capitalist economies we can point to three mechanisms which are crucial. First, markets reallocate resources from the less-efficient to more efficient organizations. This is an automatic mechanism.²⁶ Second, bankruptcy, takeovers, and mergers are means by which inefficient organizations are eliminated or re-organized. Third, entry of new organizations can lead to new routines. Then as Nelson and Winter (1982: 9) argue: "Patterns

²⁴This argument is forcefully argued by Murrell. See, for example, [5]. The classic work in this area is Nelson and Winter. The approach derives from Schumpeter.

²⁵In other words, routines economize on information processing.

²⁶In socialist economies redistribution among organizations was a function of the planner. The typical behavior, however, was to redistribute from the more efficient to the less efficient. This put much less pressure on organizations that had inefficient routines.

of differential survival and growth in a population can produce change in economic aggregates characterizing that population, even if the corresponding characteristics of firms remain constant."

We can summarize the elements of the evolutionary paradigm:

- persistence in organizational behavior: this follows from the use of routines and the fact that search reflects the historical experience of an organization
- focus on economic environment: in a stable environment the types of routines and behaviors that are present in any society will be conditioned by the environment; they will have adapted.²⁷ If the fittest survive, then those organizations will be those most suited to the environment. Hence, when change occurs, the organizational routines that exist will be suited to the historical setting.
- entry and exit are emphasized: change within organization takes a back seat to change from competition between organizations.

One of the critical insights of the evolutionary view is that it is easier to create new private firms than to change the behavior of (former) state-owned enterprises. Organizations have their own routines which formal changes in ownership are unlikely to change right away. For example, the enterprises that survived central planning have routines that are conditioned to the administrative-bureaucratic system of planning. Not only the routines, but the personnel in these institutions were selected according to the needs of the environment pre-transition. Not that introducing market reforms does not put pressure (of the bottom line variety) on enterprises. Rather, that the effects of marketization may be different than what we would predict from

²⁷Does this mean that over time the society will become necessarily more productive over time? No. Increasing fitness means increasing productivity only if a social system encourages productive behavior.

neoclassical firms. The inherited institutional structure leads to different responses and thus unintended consequences.

The evolutionary approach would suggest that a radical change in the economic system will require large changes in organizational design. This will induce subpar performance during the transition phase. There are two aspects to this. First, routines that features of organization that are productive in one environment may be much less so in another.²⁸ Second, there may be a general decline in performance of all organizations as they undergo change. The evolutionary view thus counsels against rapid change.²⁹ Performance may decline substantially if radical change accelerates the pace of organizational flux.³⁰

One aspect of this is the deterioration of network capital that arises when rapid change in the environment occurs. The network of relationships that have been built up in an economy – its network capital – is an important component of the aggregate capital stock. The value of this capital is manifested in the reduction of search and transaction costs that it entails. The presence of the network frees decision-makers in the enterprises from the need to worry about inter-enterprise coordination. In effect, it turns the production decision for the enterprise away from a general-equilibrium problem in which decision-makers consider the actions of all actual and potential suppliers, customers, and competitors. The network allows the decision-maker to focus on existing relationships, and hence to evaluate decisions in a more

 $^{^{28}}$ To take the simplest example, under planning an emphasis on technical production issues to the extent of ignoring marketing was an effective strategy. This strategy no longer is effective once the transition to a market economy begins.

²⁹Thus Murrell [6, 42] argues that "whereas in the long run a market system might be the most productive economic environment, in the short run, when routines and expectations are still adapted to the bureaucratic environment of central planning, a swift changeover to the market could be very destructive of the capacity of the existing enterprises to produce output."

³⁰Evolutionists would argue that emphasis on privatization of existing state enterprises may hinder the development of new private enterprises. This is problematic if the former are more resistant to change than expected by neoclassical economists.

partial-equilibrium setting.

In a market economy, as Hayek emphasized, the network of relationships is the created not out of a conscious design, but as the by-product of individual decisions. Firms post prices to increase their sales. They do not consider the information content of the prices to other agents. Nor are the benefits, in terms of reduced information costs to other agents, internalized by the firm. These failures are not problems, however, because the objective of maximizing profits provides the incentives for firms to set prices that reveal information.

In a socialist economy, the planning system coordinates actors and produces a network.³¹ This may not be the most efficient network, but it is valuable, nonetheless. Creating a new network is very costly; as the network is destroyed, agents must bear large search costs and bargaining costs to find customers and suppliers. Transition threatens the networks that have been built up, and it is very costly for individual actors to attempt to build new ones.³² The uncertainty surrounding the deterioration of network capital is the primary factor that increases the survival orientation of enterprises.

The deterioration of network capital occurs as enterprises deviate from the old delivery patterns. Most enterprises continue to receive and deliver as under the old regime. They try to preserve the network to avoid the search costs needed to find new suppliers. Some enterprises, however, have much to gain by deviating. These are the enterprises that delivered commodities to users at prices below what can be achieved elsewhere. Those who have valuable commodities (most likely raw materials or specialty alloys) are most likely to deviate from the old trading patterns. This, in turn, implies that the rest of the enterprises cannot simply maintain the network as is. Some

³¹The network of relationships created by Gosplan and Gossnab reduce the transactions costs for the enterprise, but much effort is clearly expended by these agencies to create these links. Moreover, imperfections in the plan force enterprises to establish informal networks on their own, to secure inputs that are not available through the plan.

³²Ironically, the importance of these networks is much greater to the state-owned sector than the new private sector which builds up its own networks incrementally.

unraveling takes place. Enterprises are thus forced to rebuild networks. Because rebuilding is costly in terms of resources and effort, output necessarily falls.

The evolutionary view provides many insights on the process of transition. The focus on the limits of organization adaptation is crucial. But against this we must set the costs of continued operation of the system. Here the debate over the fundamental sources of inefficiency of the planning system becomes crucial. To the evolutionists the fundamental problem with planning was the lack of dynamic efficiency; the system's inability to innovate. But this view understates the cost of allocative inefficiency under planning. If negative value added is predominant, then continued operation of the system may be much more costly than the result from organization revolution.

Despite the insights from the evolutionary view, I think that the argument against equilibrium theory misses the point. It is true that comparative statics depends on the *ceteris paribus* assumption, and transition is a situation where so much is changing that this assumption may be unwarranted. It is a slippery slope, however, to start talking about assumptions being unwarranted.³³ The fact that a lot changes in transition is really an argument to be careful, not to dispense with equilibrium theory. Carefully applied we can still gain important insights. Moreover, the argument about equilibrium deflects our attention from a more difficult problem.

References

- [1] Brada, Josef, "The Transformation from Communism to Capitalism: How Far? How Fast?" Post-Soviet Affairs, vol 9, 2, 1993: 87-110.
- [2] Conquest, Robert, Reflections on a Ravaged Century, New York, Norton, 2000.

 $^{^{33}}$ The argument that economic analysis is useful *except* when applied to transition countries is commonplace in the EEFSU.

- [3] Goldberg, Linda, Barry W. Ickes, and Randi Ryterman, "Departures from the Ruble Zone: The Implications of Adopting Independent Currencies," *The World Economy*, vol 17, 3, May 1994.
- [4] Hay, Jonathon R., Andrei Shleifer, and Robert Vishny, "Toward a Theory of Legal Reform," *European Economic Review*, 40, 1996: 559-567.
- [5] Murrell, Peter, "What is Shock Therapy? What Did it Do in Poland and Russia?" *Post-Soviet Affairs*, vol 9, 2, 1993: 111-140.
- [6] Murrell, Peter "Evolution in Economics and in the Economic Reform of the Centrally Planned Economies." in Clague, Christopher and Gordon C. Rausser, eds.