

Economic Transition and Human Development

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I. Introduction

Economic reform in some former command economies had started in the late 1950s and 1960s but 1989 marked the watershed of comprehensive transformation for most of these former command economies. For some countries, the impetus for a whole scale economic transformation was necessitated by the persistent decline in factor productivity with the consequence of an almost complete collapse of the economy; while for others, the economic condition was not as dire but the record of economic development was less than satisfactory such that transformation was a means to speed up the country's overall development process. In both cases, the root of the problem has been a properly functioning price system and a lack of a set of legal and financial institutions to support the price system and to protect property rights. Thus, the transition would have to be an undertaking of immeasurable magnitude and would generate a profound effect just as when market economies were converted into command economies some decades before. Yet, there has not been a unified theoretical foundation which would guarantee the success of the reform endeavor.

Transition economies encompass many different geographic regions in the world, with different economic status in terms of per capita GDP attainment, and are different in their historical and cultural background, geographic area, population, and natural resource endowments. Some countries are small and relatively homogenous in many respects while others are large and more heterogeneous. All these factors affect their abilities to cope with the necessary institutional changes in the execution of economic transformation.

In the early stage of a planned economy, incomes and other economic opportunities were

more equally distributed as they were intended to be according to the communist ideology. However a strong commitment to distributive equality would also be more likely to generate inefficiency due to the inherent moral hazard problems associated with many socialistic programs. Thus the size of total income to be distributed among people would not be able to grow at a satisfactory pace according to the same ideology. The economic system also suffered from chronic instability as the planners were not able to carry out policies systematically, mainly because planners were unable to obtain information to correctly substitute what would be supplied by the market mechanism and to offer proper incentives to all involved in the production process. Furthermore, the cost of monitoring economic activities grew geometrically the larger the size of the economy. The decision- makings in most of these countries had the characteristics of being autarkic and bureaucratic. By the later stage of the planned regime, there was not only a deterioration in general economic well being, but also a setback in distributive equality. It was inevitable that in order for a country to survive and catch up in the world community, an alternative approach must be adopted.

Basically there have been two approaches to transition, the drastic/shock therapy and the gradual approaches. The drastic approach to transition aims at severing the ties between the state and the actual production units as quickly as possible so as to establish the credibility of the government and to change the behavior of the production firms. Russia, Poland and the Czech Republic are the typical examples where radical economic reform was easier as their political changes were more rapid and fundamental. On the other hand, the gradual approach usually starts on a few sectors (such as agriculture) capable of harvesting relatively large gains in productivity once liberalized, with people being given enough economic incentive during the longer liberalization process. Then the same liberalization process is extended to other sectors in

the whole economy. This made the transition process more stable, with the planning system and the market system coexisting for a longer while. China and Hungary are the examples of this approach where the countries did not go through a very fundamental change in their political structure. China started its agricultural reform in 1978 and it was not until 1984 when reform had finally spread to the urban areas. Either approach to transition requires that the unproductive state-run enterprises be retired and replaced by new and vital private enterprises to ensure a smooth transformation of employment opportunities for people, from the state to the market.

Whichever of the above two approaches a country takes, the reform agenda must have a multiple dimensions, among them the following are the most urgent: the liberation of individual rights to economic decision-makings through the enforcement of property rights and ownership, and the establishment and execution of a set of comprehensive macroeconomic fiscal and monetary policies. As transition progresses, there would be social problems which have either been disguised within the old system or were newly surfaced with the creation of the market. Even though reforms are basically economic in nature, their social consequences have become an integral part of the general reform endeavor, with issues related to unemployment, income inequalities, and human resource development being the most critical. It would not be a mere conjecture that greater degree of investment in human resource would speed up the process of transition, and it is the success or lack of improvement in human development which should be the final judgment of whether reform has achieved its ultimate objective of sustaining a long term growth of the economy – economically, socially, and demographically.

II. The Human Capital Development

Each transition economy's human resource development has proceeded under a set of very unique historical preconditions (such as the timing of its exposure to market orientation and

the inherent ideology concerning equality between social classes and between sexes), exogenous pressures and opportunities (such as population growth and the ability to take advantage of technological changes elsewhere), and government policies (such as the expenditure composition in defense, education and health, and the degree of reliance on direct taxes).

Robinson (1993, pp. 373-87) has postulated that the success stories among the Asia-Pacific Rim countries are attributable to the interaction of these countries' inherited favorable preconditions, the exogenous pressures and opportunities, and government policies. Williamson (1993) demonstrates that among the countries in the Asia-Pacific Rim, a good share of the differences in growth performance can be explained by the human capital and the demographic forces. An important finding of Williamson is that among the Asia-Pacific Rim countries, there is a strong correlation between age dependency and a country's ability to increase savings and stimulate capital deepening. It is also important to investigate the differences among these transition economies regarding women's contribution to the transition process and the effect of transition on women's well being. The changing size of female labor force and the female labor market participation make the overall labor supply of a country much more elastic. (Lim 1993) suggests that female labor force has helped fuel the economic miracles in the south and south-east Asia where the export sector has been credited for playing a leading role in development. Female laborers may be as productive as their male coworkers but are under-represented in the managerial level and are more willing to do the repetitive type of work, thus are less costly to the employers especially in the export-oriented light industries such as electronics, textiles, food processing, footwear, chemicals, etc. Furthermore, women usually assume the role of being the secondary income earner in traditional family structure and are more likely to bear the burden of unfavorable employment adjustment whenever the economy goes through structural changes or

encounters international trade disturbances. These arguments concerning the development in Asia-Pacific region could be highly applicable to the transition economies where structural changes have been great. For example, in describing the conditions faced by women in China's transition process, M. Wolf states that:

“Without tracing the rise and fall of China's economy, it is fair to say that the state has managed its unemployment problem over the years at considerable cost to women. Women have not been accepted as workers who need jobs and their benefits are not equal to those of men. This is not to say that women have seen no improvement in their lives and in their access to productive labor, for they have, and those women who lived through the transition are sincere in their appreciation of what the socialist transformation has meant to them personally. But,... equality is still a long way off.”(M. Wolf, “The People's Republic of China,” in J. Farley ed. *Women Workers in Fifteen Countries*, 1985, p.35)

An important characteristic shared among most of the planned economies is the comprehensive provision of education and health care for their people. By the development standard, people in many of the planned economies, including the Soviet Union, the Central and Eastern European countries, and China, were relatively well-educated and had quite equitable access to basic health care. The comprehensive provision of education and training offered to people, especially to women, was responsible for the higher than average overall labor market participation in these countries. However, these countries also shared a common shortcoming in that the education and training provided for the people were very rigid, outdated, and inefficient. Thus, the education system inherited by the transition economies needs an urgent overhaul to meet the need of a new market system. Furthermore, people were used to mandatory job assignment were subject to strict control of migration to urban area. These shortcomings have the following consequences (N. Barr, 1994, pp. 121-59):

- i. Labor productivity was only about one-third that of middle-income OECD countries.
- ii. Wage rate bore no relation to productivity or human capital investment.

- iii. Wage dispersion in industrial sectors was lower than in the west to generate enough incentives.
- iv. Free education has not contributed to social advancement for the rural area or for the poor.
- v. The government basically denied the existence of unemployment, and the policies to address the unemployment issue, if there were any, were inadequate.

Economic transitions began a reallocation of labor from investment goods and heavy industries to consumer goods and services, with employment in state sector being replaced by employment in the private sector. Increase in returns to human capital was visible in the first few years of transition because of the more rational wage structures. However, there was a decline in the aggregate employment level as the output in state sector experienced sharp declines but the private sector failed to expand its activities at a pace fast enough to completely absorb the labor discharged from the state sector. Changes in a country's net employment was the combined change in employment in the state sector and the newly emerged private sector and the exits from the labor market. Among these countries, increased nonparticipation was a very serious problem in the Czech Republic, but Hungary, Poland, and Romania were plagued by increased unemployment. The decline in labor force participation was in general more severe among women than men. Furthermore, the newly unemployed also came from the inexperienced new graduates and from the private sector. Unfortunately the Eastern European countries have long exit rates from labor market, just like most of the industrial countries in Europe. Generous unemployment compensation policies and the structural policies such as the regulations governing collective dismissals and severance pays (common in the former Czechoslovakia, Hungary, and Poland) have also discouraged employers from hiring new workers and slowed down the process of workers' moving from unemployment to employment.

By early 1990s, most transition economies had higher unemployment rates than most OECD countries, yet the government had spent smaller percentage of GDP on improving the well being of laborers. Furthermore, for the few labor market policies the government had, the

public expenditure would be concentrated on passive measures such as unemployment compensation and early retirement rather than on active programs to develop worker's new skills. The effectiveness of labor market policies was further impaired because there was simply not enough demand for labor. Workers unemployed for a long period may become virtually unemployable, reducing the effective future labor supply. The new graduates lack employment opportunities even though they might have the strongest incentive to make the major human capital investments required by economic restructuring.

Since 1989 employment has shifted from industry and agriculture to services, in particular in trade, health, and education. Private sector employment has grown. In Poland, the private sector's share of total employment was 45%, and in Hungary it was 35%, but in the remaining Eastern Europe the private sector employment remains at around 20%. New firms in the private sector use wage mechanism to attract workers from state enterprises. Consequently private sector employees usually earn higher wage than those employed in state enterprises even though they may not receive as favorable benefit package. The differentials in the composition of the overall compensation package vary across sectors and across countries. Since the new hires in the private sectors mostly come from those discharged from the state enterprises rather than from the total unemployment pool, the unemployment problem at large remain serious.

The return to human capital investment (via education) was quite low during the pre-transition period, with physical work being favored over mental work and production being favored over service. There was not much an interregional wage differential either. Among the secondary education in Eastern Europe, 35-40 percent was in vocational programs as compared to 10% in the United Kingdom. Transition brought about a turn-around of this trend, with the return to education beginning to rise most rapidly in the Czech Republic and Hungary. In Romania, where there has been little private sector development, the wage structure for different schooling levels barely changed in the early transition years, a university degree still provided only a 30% wage premium over high school completion.

Equitable access to basic health care for all people was a great accomplishment of the

government and was responsible for the closing up of the discrepancy in life expectancies between the CEE countries and the more industrialized market economies by mid-1960s. However, the gap started to widen again. By early 1990s there was a sharp decline in men's life expectancy in Russia. The health status of Chinese people improved remarkably by the end of 1970s due to a comprehensive general basic health care policy of the government which was made possible as a result of rising national income during the period. But by late 1980s, the health status of Chinese people started to deteriorate, falling behind countries of similar income level. This was primarily attributable to general pollution and other occupation related risk and work environment problems. The Central Asian republics also experienced a dramatic deterioration in health between 1988 and 1991.

III. Statistical Analysis

Data on economic performance and human development are compiled for twenty- seven transition economiesⁱ for 1993-4 (see Appendix) from publications of the World Bank, United Nations, and the International Monetary Fund. Cross country regression analyses have then been conducted to study the relationship between the economic performance and some economic and human development variables. It is with the understanding that data reliability is often put into question for some of the transition economies that the following results are presented. However, the statistical results are robust and encouraging enough to allow one to make reasonable inference on the correlation between the variables used in the study and a country's economic performance.

The dependent variable is proxied by the per capita GDP in US dollar adjusted for purchasing power (PPP\$). Major explanatory variables include the annual population growth rate, the agricultural sector's share of GDP, the ratio of female labor force over male labor force, the defense expenditure as percentage of GDP, the trade dependency, and the imbalance between

ⁱ These countries are: the Czech Republic, Hungary, Croatia, Slovakia, Latvia, Poland, Russia, Belarus, Bulgaria, Estonia, Kazakhstan, Romania, Ukraine, Lithuania, Turkmenistan, Uzbekistan, Armenia, Azerbaijan, Kyrgyzstan, Georgia, Albania, Tajikistan, China, Mongolia, Viet Nam, Laos, and Cambodia.

economic performance and the human development performance. The least square estimation equation is represented by:

$$\text{PCGDP} = C + \forall_1 \text{POPGRO} + \forall_2 \text{AGDP} + \forall_3 \text{DEFGDP} + \forall_4 \text{TRADEDEP} + \forall_5 \text{GHDIFF} \\ + \forall_6 \text{LABORFM} + \forall_7 \text{INFLATION}^2$$

where PCGDP = per capita GDP,

POPGRO = the average annual population growth rate, 1960 - 1993,

AGDP = the agricultural sector's share of GDP,

DEFGDP = defense expenditures as percentage of GDP.

TRADEDEP = trade dependency as proxied by the ratio between sum of imports and exports over GDP,

GHDIFF = imbalance between economic performance and the human development performance as proxied by the absolute value of the difference between GDP index and Human Development Index HDI,

LABORFM = the ratio of female labor force over male labor force, and,

INFLATION² = annual inflation rate squared

**Table 1: Regression Estimates of Economic Performance
of Twenty Seven Transition Economies**

Dependent Variable: Per capita GDP

Number of Observations: 27

Variables	Coefficient	T-Stat.
C	9830.20	9.48
POPGROW	-577.27	2.78
AGDP	-21.55	2.34
DEFGDP	-164.12	2.57
TRADEDEP	16.32	2.41
GHDIFF	-5906.64	4.60
LABORFM	-4563.30	3.80
INFLATION ²	-7.80E-05	2.61

Adjusted R-square = 0.77

F-stat = 13.63

The regression estimation has been corrected for heteroskedasticity.

The above regression results, even though quite primitive, are consistent with the theoretical hypotheses, and both the t-statistic and the F-statistic are greater than the critical values. The independent variables together are able to explain about 77 percent of the per capita GDP differentials among these countries. The per capita GDP is inversely related to the average annual population growth rate. The average population growth rate is 1.4% for these transition economies together. This is particularly significant in light of the fact that these transition economies have fairly high average age dependency rate (defined as the percentage of total population 14 and younger or 65 and older) at 60.4% and the average size of labor force is only 48.6% of the total population. Hungary and the Czech Republic are among the lowest population growth countries with low age dependency rate while Tajikistan, Uzbekistan, and Turkmenistan are among the highest population growth countries with highest age dependency rates. Hidden behind the population growth are the changes in the infant mortality rate and life expectancy. These countries together show an average infant mortality rate of 29.11 per 1000 live births and a 68.89 (72.38 for female and 64.28 for male) years of life expectancy.

The per capita GDP is inversely related to the agriculture sector's share of GDP due to the relatively low productivity in the agricultural sector compared to the industrial and service sectors in the economy. In general, the upper-middle income countries and most of the lower-middle income countries have lower percentage of GDP produced in the agricultural sector. Armenia, Georgia, Albania, and Laos have the largest agriculture GDP shares of close to or greater than 50%. Nevertheless, in terms of production efficiency in the agricultural sector (as represented by the ratio of GDP share over labor force share), Armenia and Georgia are much more productive than Albania and Laos. Missing data on agricultural sector's share of labor force on several countries prevents the inclusion of production efficiency as an explanatory variable in the regression estimations.

The per capita GDP is also inversely related to the ratio of female labor force over male labor force because of the relatively low productivity of female workers. Larger number of female workers relative to male workers brings down the average productivity and consequently the per capita GDP would be lower. As a group, these transition economies have an average female labor force equal to 46.85% of the entire labor force.

The defense expenditures as percentage of GDP is an important policy variable. It is reasonable to assert that higher the defense expenditures, the lower would be the per capita GDP especially for countries that have not used defense technology as impetus for improvement in general production technology.ⁱⁱ Before transition took place, these economies shared a common characteristic of appropriating a relatively large percentage of total government expenditures on national defense and consequently have suffered from a tremendous waste and inefficiency in resource utilization. The regression results here show that the countries that were determined and have been able to reduce and maintain a low defense budget once transition process began are likely to have higher per capita GDP. Furthermore, since defense expenditures and expenditures on health, education, and social security necessarily compete with one another for limited government revenue sources, high defense expenditures as percentage of GDP would reflect negatively in a country's achievement in the area of human development as well. On the average, these countries still maintain a defense budget equivalent to 4.36% of GDP. (With data omission on some countries, the average size of expenditures on health for these transition economies is 4.18% of GDP and the average size of expenditures on education is 6.2% of GNP.) Croatia, Russia, Azerbaijan, Laos, Cambodia, China, and Viet Nam are among the high defense expenditure countries in the group.

The tax revenue is another macroeconomic policy instrument variable. While the tax revenues from personal income and corporate profit are considered a major discretionary policy variable among most of the industrialized western countries and are considered a progressive

ⁱⁱ Studies on peace dividends have shown that the social welfare of a nation is adversely affected by the size of government expenditures on defense, e.g., siii Fan and Fan, 1997 and 1998.

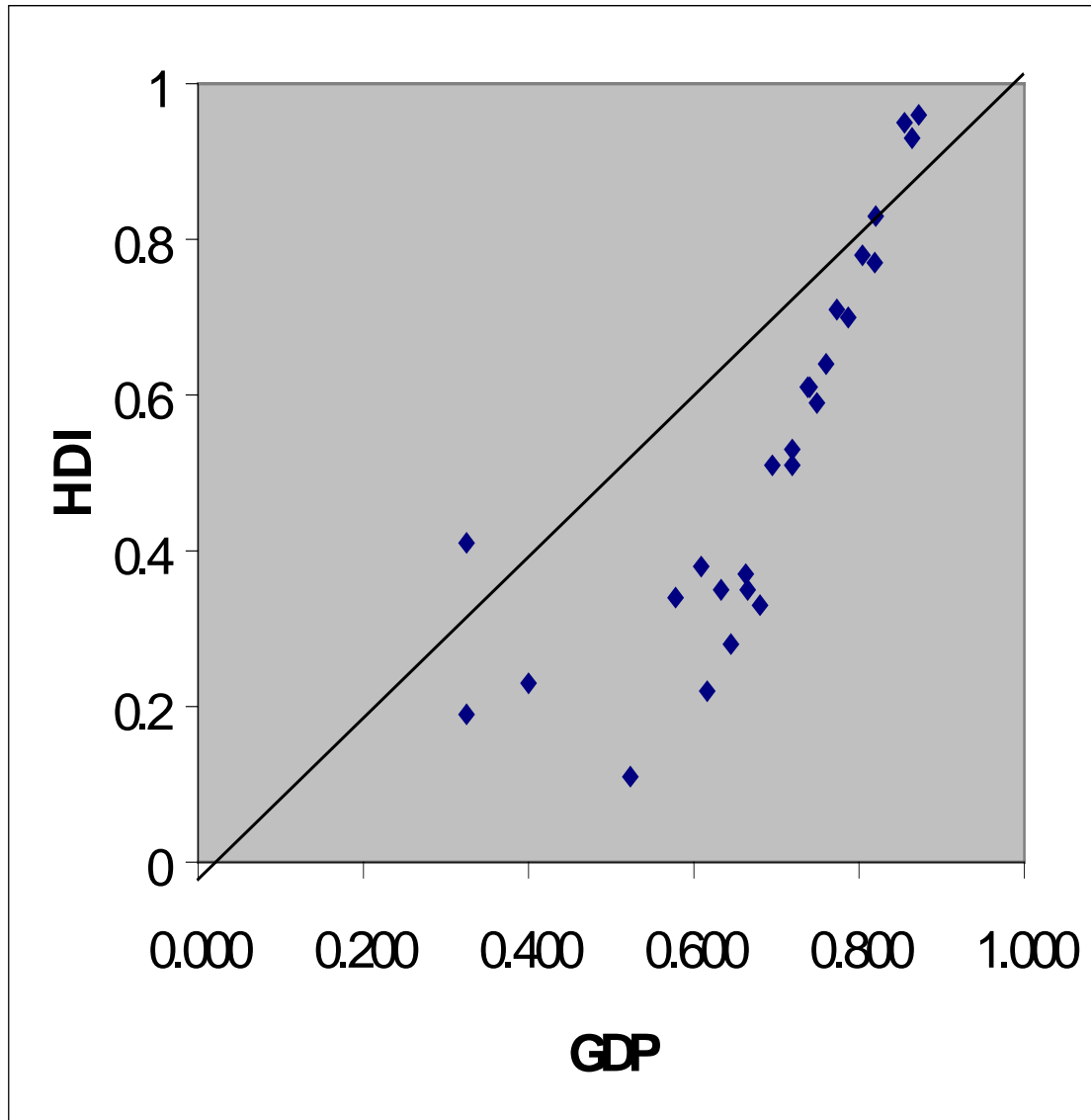
element in a country's tax system. Unfortunately, data on these taxes are not available for quite a few of these transition economies, especially the newly independent former Soviet Union states, Viet Nam and Laos, which makes regression estimation impossible. On the other hand, data on tax revenues from international trade are available from international organization data sources. The tax revenue from international trade represents a regressive element of a country's tax system and is indicative of the limit in the fiscal power a government is subject to. For these countries, tax revenue from trade is equal to 11.4% of the total tax revenues on the average, but varies widely among individual countries. Estonia, the Czech Republic, Romania, and Latvia have small percentage of tax revenue from trade while Viet Nam, Cambodia, Laos, and Azerbaijan heavily rely on taxes from international trade. A preliminary regression estimation shows that tax revenue is not a significant variable and is thus excluded from the final regression result.

Inflation is the second macroeconomic variable used in the regression estimation. It is theoretically sound to hypothesize that inflation has a negative impact on a country's overall economic performance. Radical swings of inflation rate are common predicament and embarrassment for most of these transition economies. On the average these countries suffer a 519% inflation rate in 1993, ranging from 6.3% in Laos, 11% in Croatia, up to 1428% in Belarus and 3691% in Ukraine. The regression results show that inflation rate squared has a negative and statistically significant effect on per capita GDP. (A precaution is needed in using inflation as a variable because of numerous contradictory reports on inflation rates experienced by some countries and simple inflation rate by itself is statistically insignificant in the regression estimation.) The outrageous inflation rates indicate that many of these governments are incapable of carrying out a prudent and stable monetary control.

GHDIFF, defined as the absolute value of the difference between the GDP index and the Human Development Index HDI of a country as reported in the United Nations Human Development Report, is used as a proxy of imbalance between a country's pursuit of economic improvement and human development. The greater the degree of imbalance toward one or the

other, the lower is the per capita GDP. This is based on the hypothesis that economic growth and human development would mutually reinforce each other and that a balanced achievement in both is most efficient and vital for a country in pursuing its long run development goals. As a country becomes richer, people can afford better education and health care. At the same time, better educated and healthier people are more productive people. The regression results confirm this hypothesis. Among the 27 transition economies studied here, performances in human development are in general better than that in the economic front. The Czech Republic, Hungary, Slovakia, Latvia, Russian Federation and Poland have relative balances at the high end of overall performance. Tajikistan, Laos, and Viet Nam have extreme imbalances at the low end of overall performance. Figure 1 below shows the GDP and HDI distributions for these 27 countries. Of course the linkage between GDP growth and human development is more complicated in that in addition to the conscientious effort of the government at the macro level in dictating the direction of its expenditure emphases, at the micro level individual family preferences and consumption choices regarding the disposal of family income toward health and education also play an important role in determining the reinforcing power between economic growth and the achievement in human development.

Figure 1: The GDP-Human Development Imbalance



Trade dependency is measured by the sum of exports and imports as percentage of GDP. A high trade dependency rate reflects a country's openness as opposed to autarchy. Geography is only one of the factors which determine the size of the trade sector in an economy, other factors such as whether production activities are mono-cultural or multi-cultural and whether the political leaders and policy makers are inclined toward isolationism or not, could be more crucial. With a greater degree of trade dependency, economic activities have to be conducted more in line with economic principle of efficiency so as to enable a country to compete in the international arena. The country would also be more receptive to the transmission of new technology from other country that in turn contributes to improvement in overall factor productivity. The regression estimation confirms this hypothesis and shows that per capita GDP is positively related to trade dependency. The average trade dependency rate for 27 transition economies is 55.58%. The Czech Republic, Slovakia, Bulgaria, and Mongolia have relatively high trade dependency rates. Mongolia is a landlocked-low income country, with trade being necessitated by its mono-cultural type of economic activities. The other three countries are upper- and lower- middle income countries. On the other hand, Georgia, Tajikistan, and Cambodia, all low- income countries, have relatively low trade dependency rates. The long-standing political isolationism in the past would be the main reason for their relatively unimportant trade sector.

IV. Comparative Study of Five Countries

The Czech Republic, Hungary, Poland, China, and Russia will be the focus of a more in-depth analysis. The Czech Republic and Hungary are upper-middle income countries, Poland and Russia are lower-middle income countries, and China remains a low- income country. The early 1990s marked a period of volatile changes in GDP and inflation for most transition economies, and these five countries were no exception. Negative GDP growth rate and high inflation rate were the norm among these countries. Russia had the worst inflation record, followed by Poland and China. Comparatively, Hungary and the Czech Republic had much milder inflation.

However, as these countries move into mid 1990s, improvements have been made in both economic growth and in combating inflation, with various degrees of success among them. In terms of general performance, China and Poland have done well, followed by the Czech Republic and Hungary, and then Russia. China has reached a soft landing in 1997 from a near 30 percent inflation in 1994 and has reversed a negative GDP growth streaks in early 1990s to close to 10 percent positive growth rate expected for 1998. Similarly, Russia has finally reversed a trend of negative GDP growth for several years and started a small but continual positive GDP growth in 1997, with annual inflation rate reduced from over 200 percent in 1994 to 11.6 percent in 1997. Inflation rate was also still in double digit in the Czech Republic, Hungary and Poland. (See Table 2.)

In order to find explanations for the difference in performances among these transition economies, one is often tempted to go to the relationship between political liberalization to democracy and success in economic progress in transition economies. In terms of political liberalization, the Czech Republic and Russia have already gone through dramatic changes while China has barely started its political liberalization. Political liberalization may not be either necessary or sufficient for a successful economic progress.ⁱⁱⁱ (Intriligator, 1998).

ⁱⁱⁱ According to these two classifications, Ukraine is like Russia, good in political reform but bad in economic performance, Viet Nam is like China, good in economic progress but slow in political changes, and the north Korea is a good example in which the performance has been very poor both politically and economically..

**Table 2: Economic Growth and Inflation
in Five Transition Economies**

	China	Czech R	Hungary	Poland	Russia
Annual GDP Growth Rate (%)					
1990-4	-22.5	-4.7	-2.0	+1.6	-10.6
1994	+10.6	+3.5	+1.0	+4.3	-16.0
1995	+8.9	+4.1	+2.0	+5.2	-4.0
1996	+9.3	+4.0	nil	+7.3	-7.0
1997	+8.1	+0.8	+4.3	+7.6	+1.0
Annual Inflation Rate (%)					
1994	+27.4	+10.5	+18.9	+34.6	+208.7
1995	+12.1	+8.1	+29.0	+22.4	+187.2
1996	+6.9	+8.6	+20.1	+19.1	+23.9
1997	+1.1	+10.1	+18.2	+13.1	+11.6

Data Source: The GDP growth rates and inflation rates are from “Emerging-Market Indicators” in The Economist, issues in 1994, 1995, 1996, 1997. The average annual GDP growth rates for 1990-4 are from World Bank data.

In Tables 3 and 4 below, some statistics of economic performance, government finance, and human development are presented. The rate of population growth has adverse effects on per capita GDP. During the period between 1960 and 1993, China had the highest population growth rate while Hungary and the Czech Republic had the lowest among these five countries. The urban population growth had been faster than the general population growth for these five countries for the same period. The urban population growth has been tapering off in early 1990s in the Czech republic, Hungary, Poland and Russia, with Russia actually experiencing a slight decline in urban population. China has the highest urban population growth and the situation is worsening in early 1990 compared to thirty years before. China also has a relatively high infant mortality rate and a low female life expectancy. In Russia, regardless of the seemingly improved general economic performance, unemployment problem is serious and people have been suffering from increase in death rate due to depressed economy and the cigarette and rising alcohol consumption such that life expectancy for both male and female in the country have declined dramatically in early 1990.

China has substantially larger share of GDP (21%) produced in the agriculture sector compared to the other four countries (6-7%). China has an even more disproportionately large percentage of labor force (73%) engaged in agricultural production. This accounts for the low labor productivity in agriculture in China. Poland also has low labor productivity in agriculture, with 27% of total labor force producing 6% of GDP. Labor productivity is highest in the Czech Republic, followed by Hungary and Russia. There is not much difference in these five countries in the female share of the total labor force, ranging from 44% in Hungary to 48% in Russia.

The regression estimates show that the defense/GDP ratio and the per capita GDP are inversely related. The statistics show that these five countries differ greatly in their defense/GDP ratio, from the highest 9.6% in Russia, 5.6% in China, to the lowest 1.6% in Hungary. On the other hand, the trade dependency rate is shown to be conducive to the per capita GDP performance. It is highest in the Czech Republic at 109, followed by Hungary and Poland at 68

and 52, respectively. China has trade dependency rate of 47 and Russia has the lowest at 32. Finally, according to the GDP/HDI imbalance variable, China has a substantially large degree of imbalance between its human development index (0.61) and GDP index (0.38) as compared to the other four countries.

Comparison of these statistics thus far has confirmed the theoretical hypothesis and the regression results. In terms of human development, the data can also shed some light on the different pictures for these countries. First, the Czech Republic, Hungary, and Poland have better income distribution as reflected by their lower Gini coefficients than China and Russia. As expected throughout the transition process, income distribution have worsened. The ratio of the income of the richest 20% population to that of the poorest 20% has increased from 2.91 in 1985 to 3.16 in 1989 in Hungary, from 3.28 in 1985 to 3.92 in 1989 in Poland, and from 5.78 in 1980 to 6.53 in 1990 in China. The Kuznets inverted- U phenomenon seems to have been materialized in these economies, especially in China.^{iv}

In the area of education, China has the lowest combined 1st, 2nd and 3rd level enrollment rate for both male and female, with female enrollment lower than that of male. This low female enrollment is quite an opposite phenomenon of the other four countries. Another indicator of performance in human development can be reflected in the gender difference in income earnings. In Table 4, an index of female income inequality is constructed by dividing the income shares of male and female by their respective labor shares in each country, and then subtract these ratios from unity. In this regard, Hungary fairs the best with female income inequality equal to 0.10 while China and the Czech Republic the worst (at 0.17 and 0.19, respectively).

The government in each of these countries has played a very significant role in shaping the performance in the economic front and in human development. The overall economic performance and the ultimate effect on human development are determined by the composition

^{iv} Gini coefficient has not been entered in the formal regression estimation due to the missing data for 8 out of 27 countries.

of government expenditures (in defense, education, and health, etc.) and the structure of revenue sources and how the policies are carried out. According to the index of economic freedom which was constructed by the Heritage Foundation and the Wall Street Journal for the purpose of demonstrating how government interventions could restrict the economic relations among individual citizens (The Economists, Dec 20, 1997, p.154), the Czech Republic is ranked highest in economic freedom among these five countries in the sense that government has exerted the smallest amount of intervention such that the economic relation among individual citizens is least restrictive. Hungary is next, followed by Poland, Russia, and then China.^v The index of economic freedom, which is a combination of ten indicators including trade policy, taxation, monetary policy, the banking system, foreign investment rules, property rights, the share of economic output consumed by the government, regulation policy, the size of the black market and the extent of wage and price control, is a very relevant concept in assessing the role of the government in a transition economy and it seems that the rankings for these five countries are not just coincidental in view of the analytical theme being carried out in this study.

^v In that index of economic freedom, there are only 9 countries in the world qualified as free, with Hong Kong, Singapore, New Zealand and Taiwan in Asia, Chile in Latin America. The Czech Republic follows not far behind Chile. Hungary, Poland, Russia, and China trail measurably behind.

**Table 3: Major Economic Indicators and Government Finance
in Five Transition Economies**

	China	Czech R	Hungary	Poland	Russia
Labor Force (% of Popu)	47	53	46	49	52
Per Capita GDP (PPP\$, '94)	2604	9201	6437	5002	4828
GDP Shares					
Agriculture	21	6	6	6	7
Industry	47	40	28	40	38
Service	32	54	66	54	55
Labor Force					
Agriculture	73	11	15	27	20
Industry	14	45	31	37	46
Service	13	44	54	36	34
Sector Productivity (GDP share/Labor share)					
Agriculture	0.29	0.55	0.4	0.22	0.35
Industry	3.36	0.89	0.9	1.08	0.83
Service	2.46	1.23	1.22	1.5	1.62
Government Expenditures					
Defense/GDP (%)	5.6	2.6	1.6	2.5	9.6
Education/GNP	2.0	4.6	7.0	5.6	4.0
Health/GDP	na	5.9	6.0	5.1	4.1
Major Tax Revenues (% of Total Tax Revenues)					
Income and Profits	8.2	16.3	17.9	27.7	53.4
Goods & Services	71.8	32.0	31.3	27.9	22.1
Trade	9.2	4.1	5.8	8.6	24.4
Tax Revenues/Total Government Expenditures					
	60.8	89.4	85.8	84.7	69.6
Budget Surplus/Deficit (as % of Expenditures Plus Lendings Minus Repayments)					
	-19.6	2.2	1.5	-5.2	-34.1
Trade Dependency Rate					
	47	109	68	52	32
Gross Domestic Savings					
	40.0	20.0	11.0	13.0	32.0
Gross Domestic Investments					
	41.0	17.0	20.0	16.0	26.0
(As % of GDP)					

**Table 4: Human Development Indicators
in Five Transition Economies**

	China	Czech R	Hungary	Poland	Russia
Annual Population Growth (%, 1960-1993)	1.8	0.2	0.1	0.8	0.6
Annual Urban Population Growth (%, 1960-1993)	3.1	1.3	1.3	1.7	1.7
(%, 1990-1994)	4.1	0.1	0.6	1.0	-0.2
Infant Mortality rate	30	8	12	15	19
Life Expectancy					
Female	71.1	75.2	73.8	75.8	72.2
Male	66.9	69.2	64.2	66.6	59.2
Age Dependency	48	49	49	52	50
Enrollment (1,2, 3 levels)					
Female	55	70	69	80	82
Male	61	69	66	79	75
Female Income Share (%)	38.1	38.1	39.5	38.9	41.3
Female Labor Share (%)	46	47	44	46	48
Index of Female Income Inequality = $(1 - \text{Female Income Share} / \text{Labor Share})$	0.17	0.19	0.10	0.15	0.14
Overall Gini Coefficient	37.6	26.6	27.0	27.2	49.6
HDI	0.61	0.87	0.86	0.82	0.80
GDP Index	0.38	0.96	0.95	0.77	0.78
Econ/Human Develop Imbalance	0.23	0.09	0.09	0.05	0.02

The level of general government revenue and particularly taxes and other levies on enterprises are much higher in command economies than in industrialized countries. Marketization would naturally reduce tax revenues needed to finance government involvement. Some tax revenues would simply disappear as a result of reform. According to Holzmann (1992, pp. 237-9), general government revenue as percentage of GDP for all transition economies decreased from 55% to 53% during the 1985-89 period (compared to 44% for the European Community members), the taxes and levies on income from enterprises also decreased from 22% to 20% (compared to 14% for EC members). However, social security contributions increased from equivalent to 10% to 13% of GDP (equal to that for the EC members) for the same period. with fairly high tax rate (60% in Hungary, 50% in Czechoslovakia, 47% in Poland in 1992). Personal income tax was introduced in Hungary in 1988 and in Poland in 1992). According to Minanovic (1994), the taxes on social security and other direct taxes generated very minimum redistributive effect, but the cash transfers (including pensions, various family allowances, sick benefits and other social transfers), even though inefficient, did play an important redistributive role for these countries and should be emphasized as the transition proceeds simply because the wage differentials are likely to widen.^{vi}

Russia and China have visibly higher defense expenditures as reflected in the relatively high defense/GDP ratios and relatively low education/GDP and health/GNP ratios in these two countries as compared to the Czech Republic, Hungary and Poland. China and Russia have low tax revenue/expenditure ratio, at 60.8% and 69.6%, respectively, while the other three countries

^{vi} Based on a household data immediately before the collapse of communist countries in 1989, Minanovic observed that since the share of wages in gross income in socialist countries has smaller variations than in the west. Thus, a proportional wage tax is unlikely to generate any sizable impact on income distribution. In Bulgaria, Hungary, and Poland, social security payroll tax increases income concentration by approximately 1 Gini point. But the cash transfer has reduced the income concentration coefficient by 6.5-8.5 Gini points. However, cash transfers were very inefficient. On the average, cash transfers that amounts to 1% of gross income would lower the Gini coefficient by 0.23 point for the communist countries as compared to 0.63 in market economies. (Minanovic, p. 183).

have much higher tax revenue/expenditure ratios at mid- to high 80%. This might be correlated to the relatively high budget deficit rate in these two countries.

V. Individual Country Transition Experiences

1. China

China took a gradualist and more pragmatic approach to transition, contrasting Russia's more ideological approach to liberalization (Intriligator 1998). At the beginning of transition in 1978 China was very poor and relatively less industrialized compared to the Eastern European countries. The agricultural sector housed more than 70% of the total labor force but was oppressed by the deliberate government pricing policy on agricultural products. The industrial sector received tremendous subsidy from the agricultural sector. However, the degree of this cross subsidization was not very pervasive compared to the former Soviet Union which had about 8 times the per capita income and much more severe centralization. Agricultural reform started with a land reform in which collective land was broken up and distributed to individual households^{vii}. The government reduced its quantity procurement from the farmers while raising the price of agricultural products procured from the farmers. The farmers were free to sell more in the market place. This change-over of the production process was geared toward a gradual adaptation of market mechanism and consequently has generated a marked improvement in incentive and productivity, which in turn started the momentum for a remarkable increase in agricultural output of 7% per year between 1978 and 1984 as compared to a 3% growth rate in the 26 years before 1978 (Human Development Report 1997, p.49) .

By 1984, the focus of rapid economic growth in the rural area had shifted from land reform to light industry to absorb much of the labor force released by productivity increase in the agricultural sector. Towns and Village enterprises were managed by market criteria and were able

^{vii} See C. Fan and L. Fan, "Some Recent Development in Chinese Incentive Schemes in Agriculture," *Canadian Journal of Agricultural Economics* 28(2), 1980.

to escape the price and output control that still remained in the old heavy industries in the state sector. Between 1978 and 1992, the share of gross industrial output produced by towns and village enterprises has increased from 12% to 39%.

The Chinese also took a gradual approach to freeing the foreign trade sector from central control. First, special economic zones (patterned after some newly industrialized countries in Asia such as Taiwan) were established in the coastal provinces and were exempted from the control of traditional state trading monopoly control. Inside the special economic zones, exporters were allowed to retain all of their foreign exchange earnings, had access to imported material and foreign capital, and were subject to lower taxes on their enterprise profits. Large amount of domestic savings was successfully channeled into investment. By early 1990s, the distinction between a special economic zone and the rest of the economy had become less clear. Wide range of state owned enterprises, towns and village enterprises and private enterprises have more or less equal access to foreign trade.

One important feature of the Chinese reform process is the inflation which had started at the beginning of the reform in late 1970s and accelerated to an explosive magnitude by the end of the 1980s. Naughton (1991) asserts that inflation does not necessarily come as a part of the reform package, but inflation did in fact become a major problem for most of the transition economies. In the case of China, it is mentioned above that China had adopted a policy of suppressing the agricultural price and promoting the value of industrial products in the pre-reform period. This practice has served as a means of creating the profitability for the state owned enterprises and mobilizing resources toward the industrial sector and provided the government with assured revenue sources. The privatization of state owned industries had brought down the profit in these enterprises from its artificial high with a significant adverse effect on government revenues. If an alternative tax base were created early enough or if the Chinese government were willing to scale down its investment programs, it would not have to rely on the additional monetary expansion as an avenue to finance the budget deficit. Therefore, the Chinese inflation might have been set off when the deliberate low procurement price of agricultural product was abandoned with a

corresponding rising food price accounted for the major component of general price increase at the beginning, but the accelerated inflation in the late 1980s and early 1990s was the result of a wide spread price increase to most of the consumer goods and the government's choice of easy monetary policy to finance its deficit. Started in the mid 1990s, the Chinese has been successful in bringing the inflation rate down and has been able to finally declare victory in the inflation front, due to the strict adherence of a responsible monetary control. The new Premier Zhu Ron-chi is credited for the control of inflation when he was the head of the People's Bank of China (the Central Bank).

Major reforms in the agricultural sector has raised the rural income to 60% of urban income and greatly reduced the poverty in the rural area in China (IMF survey July 21, 1997). The macroeconomic growth was impressive, but the progress in reducing poverty has reversed its course and the income inequality has worsened by the second half of the 1980s. This was especially severe in the rural areas where the Gini coefficient was higher than in the urban area in 1987.^{viii} The effect of inflation was partially responsible. This deterioration of income distribution continued into 990s with the overall Gini coefficient reaching 0.376 in 1993 (see Table 4). The changing government reform strategy of emphasizing the development of the coastal areas instead of continual effort in rural development may also be partially responsible for the deterioration of income distribution. Inflation in the late 1980s sharply changed the relative prices in essential items such housing and utilities which came as a natural consequence of market adjustment in the midst of the scaling down of government in-kind transfers. Large number of urban people were pushed toward poverty. The urban poverty, however, was not as severe as the rural poverty

^{viii} According to estimation by E. Ahmad and Y. Wang (1991), the rural Gini coefficient was 0.285 compared to 0.258 in the urban area in 1987. Measured by the coefficient variation, which is particularly sensitive to the upper ranges of the distribution, it was 1.01 in the rural area compared to 0.61 in the urban area. The reform toward a market orientation had provided opportunities for some individuals to improve their earnings which explained the changes in the upper range of income distribution but the reduction in the provision of public goods and services has worsened the lower range of the income distribution.

because privatization had been slower and people had been shielded by the continual administration of in-kind transfers (Ahmad 1992). The rural poverty created a tremendous migration pressure from rural inland areas to the coastal regions. It is said that there are tens of millions of drifting labor force today in China.

2. Russia

The success of economic transition depends not only on economic factors but also on non-economic factors such as the social and political structure prior to the socialist regime, and most importantly the consistency of the reform effort. As far as preconditions are concerned, there is an important contrast between Russia and the Baltic states and the countries in central and eastern Europe. While the Russian empire was toppled by the communist ideology and thereafter the Soviet regime was maintained by a strong totalitarian government, the socialist governments in the three Baltic states and the central and eastern European countries were forced upon them and basically sustained by the external Soviet political and military power. Therefore radical economic transition would be swift and more likely to succeed because people and the policy makers were more willing to abandon the old socialist ideology and governmental structure in these countries. In addition, the close proximity to Western Europe afforded these countries to establish the property rights and other legal and economic institutions by imitating the western framework. In contrast, Russia has been through a much greater degree of struggle.

A truly market-oriented price system had never existed in Russia before the transition. The initial stage set for economic transition was one with high degree of economic centralization characterized by an internal and external macroeconomic imbalance which was worse than in Hungary but better than Poland (Intriligator 1998, p. 244). The dimension of adjustments necessitated by the reform in the areas of the liberalization of prices, the privatization of state enterprises, the drastic decline in the demand for military establishment, and the collapse of trade with the CMEA countries was enormous, yet resistance from old institutional structures lingered. Russia started its “shock therapy” in 1992 under President Boris Yeltsin with three major

components of stabilization of the macro-economy: (i) limiting money creation, government budget and trade deficits; (ii) liberalizing prices and international trade; and (iii) privatizing state owned enterprises. However, Russia ignored the institutional aspect (including property rights, a functioning legal system, stable currency and banking system) which was the foundation of the whole transition process. The government was not able to foster and maintain a competitive environment and the execution of the fiscal and monetary policies lacked constancy. The result was a tremendous loss in income, a hyperinflation, collapse in investment, and a drop in real wage and living standard. (The Russian per capita income was equal to eight times that of China at the beginning of transition, but its per capita GDP was only less than twice that of China in 1994.)

The massive unemployment carries tremendous social welfare implication, particularly the welfare of women workers. Female labor force has always been an important contributing factor to the Soviet economy. During the Soviet regime, women's labor market participation was the highest among all industrialized countries, increasing from equivalent to 25% of the total labor force in 1922 to 51% in the 1970s and 80s (Lapidus, in Farley 1985, pp.17-19). This has been a deliberate pursuit of the communist belief that working is an opportunity as well as an obligation for all people, men and women, and it is through the full participation in the labor force that women's equality can truly be protected. In mid 1960s, the country had experienced a decline in birth rate. Through upward adjustment of minimum wage and pension benefits, the government made deliberate effort to encourage female labor participation in order to alleviate the growing labor shortage. In 1994, Russian women constituted 48% of the total labor supply, the highest among the five countries. Women workers were relatively highly educated by international standard and were present in all professions ranging from arts, agriculture, education, to construction. Women have moved upward into technical and specialist positions, especially in teaching and medicine. However, glass ceiling still occurs to women in terms of their representation in the supervisory positions, given their training and work experience. Furthermore, the rising infant mortality rate in recent years is suggests that exposure to hazardous working conditions is not limited to men. The structural changes necessitated by transition have

also transformed many women into marginal workers in the entire labor market, pushing many women workers into more of relatively low-paying and insecure jobs or simply being laid off. Russian women were also disadvantaged in the legal system, the education system, the equality legislation, and wage and other labor regulations (Standing 1996). These disadvantages of women workers are hardly a first priority to be remedied by the government since the country has even greater urgency in dealing with the general problem of weak economic performance and inflation.

It is true that social policies in health, education, and welfare for most transition economies are still in their infancy. If there is any social policy, such as unemployment compensation, it would be reactionary to the immediate problem created by the improper execution of fiscal and monetary policies rather than as a framework built on a carefully deliberated long run policy objective. Russia is no exception. This is reflected in the fact that while among the western industrial countries male life expectancy has been rising, the Russian male life expectancy has decreased markedly to 59.2 in 1994, more than 10 years lower than Russian women's life expectancy, and was the lowest among the five countries.

One alarming feature of the Russian economic transition is the deterioration in income distribution. The Gini coefficient has increased from 26.7 in 1989 (Ahman 1992) to 49.6 in 1994, the highest among the five countries studied here. While poverty and unemployment might have existed but were not officially recognized before the reform, these issues have become acute as the reform process continued. Increased unemployment created by privatization coupled with the slow development of social security system and inflation have been responsible for making more poor people. Pensioners are poor, so are families with children in that it now requires two earners in the family to support the basic family needs of the pre-reform price level (Ahmad 1992).

3. Hungary

Like the Chinese, Hungary's transition process has been a gradual one. In late 1950s, traditional central planning was criticized and the Kadar regime initiated partial reform measures to improve incentives. In 1960s, partial reform failed to restore rapid economic growth which led

to the adoption of the New Economic Mechanism in 1968. Thus, while the format of central planning was retained, Hungary has long been continuously moving away from rigid authoritative economic control for a long time. By the end of 1980s, the condition in Hungary was characterized as having a low degree of economic centralization with small degree of macro-economic imbalance only slightly worse than that in the Czech Republic (Intriligator 1998). Reform on the price system, the ownership, and macro-economic stability has been the focus (Hare, 1991). Substantial improvement in price reform and ownership reform was accomplished, but macro-economic stability was less successful mainly due to the difficulty in privatizing large state- owned enterprises. Significant enterprise autonomy was allowed which made the price liberalization easier and resulted in smaller degree of shortages in the market. Subsidies to producers and consumers were reduced, coupled with uniform taxes applied to a wide range of transactions. Since the early 1990s, a commitment to policy consistency has been reflected in a more stable macroeconomic position the government has been taking. For example, government deficit was brought down from equivalent to 2.84% of GDP in 1989 to 0.15% in 1990, and the net debt in convertible currencies at the end of 1990 was 50% of GDP. The proximity to and the familiarity with the western markets have also allowed Hungary to regulate its flows of imports and exports more in line with its natural comparative advantage and consequently had exerted less constraints on the execution of monetary, fiscal, and exchange policies. Considerable increase in import and export flows after 1994 took place, further opening up the economy and improving the balance of payment situation for Hungary. The improvement in the current account was accompanied by a privatization-led surge in direct foreign investment (DFI) and in other private capital inflows (IMF Survey, July 21, 1997).

Maintaining fiscal stability and the adhering to a strict low wage policy on the public enterprise sector had also helped containing the size of general government expenditures. In contrast to the budget deficit of 19.6% and 34.1% in China and Russia, respectively, Hungary enjoyed a modest budget surplus of 1.5% in 1994. Smaller subsidies were necessary on account of the more efficient operation of the production firms. Further improvement has been made so that

total government expenditures were reduced from 53% of GDP in 1994 to 39% in 1996 (IMF Survey, July 21, 1997). From Table 2, one notices that even though Hungary did not grow as fast as China did in the 1990s, its inflation rates were not nearly as volatile either; and the performances in economic growth and inflation were certainly much better than those in Russia in the same period. For the future, reform effort would be geared toward more fine-tuning in nature and the reform in the social security system would be of particular importance.

4. The Czech Republic

One common misconception regarding the economic transition of the Central and Eastern European countries is that they all started from a very similar communist system. Because the pre-communist social and economic institutions still weigh importantly in the transition process, whatever is successful in Hungary may not be applicable in the Czech Republic in spite of the very similar population sizes and GDPs between the two countries. (For example, in 1990, the Czech Republic has 10.36 million people with \$31.6 billion GDP while Hungary has 10.37 million people with \$33.1 billion GDP.)

Historically, the Czech was a fairly industrialized rich country with a stable democracy and economy like Austria until the communist take-over in 1947. Afterwards, however, the communist control has reduced the per capita income to no more than half of Austria at the time of the Velvet Revolution in November 1989. The condition in 1989 when transition was underway could be characterized as being highly centralized as in Russia but with much less macro-economic imbalance compared to Russia, Hungary, and Poland. In another word, there had been a strong concern for economic equity through state intervention (the so-called socialism with a human face) and a strong tradition of fiscal conservatism (Brada, 1991). Furthermore, the Czech had a stricter control over inflation and fiscal discipline than the neighboring Hungary (Frydman, Rapaczynski, and Turkewitz, in Woo, 1997, p. 52). The economic transition since the 1989 revolution has been comparatively smooth in spite of the split of Czechoslovakia into Slovak Republic and the Czech Republic in 1993.

In the beginning, very little foreign capital poured into the country compared to the huge volume poured into Hungary. In the 1989-92 period, a drastic shift in trade pattern was observed -- a slight decline in the total volume of trade with other socialist economics but a more than doubled trade volume with market economies. In 1990, the Czechoslovakia's foreign debt was only one quarter that of Hungary's and its debt service ratio was rather insignificant at 13% compared to the extremely high debt service ratio of 53% in Hungary. The Czech imported capital and technology, especially from Germany.

With the ease in political liberalization, the "big bang" type price liberalization by way of freeing a broad range of prices in the post 1989 marketization seemed justified. But the result was a jump in consumer price index increase from 9.7% in 1990 to 56.6% in 1991. The production has been shifting rapidly towards the service sector. The liberalization in the labor market resulted in a huge drop in real wage of 40% from 1990 to 1991. The government and the trade union had an agreement of an unemployment compensation equal to 65% of wage for the first six months of unemployment and 60% for the second six months and a retraining program for laid-off workers (Brada 1991). The Czech was able to limit the unemployment rate to no more than 4.2% during the 1990-1993 period.^{ix} Among other things, this may be attributable to a significant outflow of more industrialized labor force to the culturally similar countries such as Germany and Austria.

A real test of privatization is the percentage of business organizations privatized in one form or another and the share of GDP produced by the private sector. The contrast between the Czech's radical approach and Hungary's gradual approach can be demonstrated here. Between 1989 and 1994, the private sector business in the Czech Republic had increased from 17% to 84% but in Hungary in the same period, improvement was made from 83 percent to 94%. More importantly in 1994, the GDP share of the private sector in the Czech Republic was 70 against state sector's share of 30 while in Hungary, the private sector's share of GDP was only 50 against

^{ix} The unemployment rate was about twice the national average in Slovakia. This regional difference has led to conflict between the Czechs and the Slovaks, both socially and politically. (Brada, 1991).

the state sector's share of 50 (Frydman, Rapaczynski, and Turkewitz, pp. 81-2).

Thus far, the forceful and centralized execution of marketization and privatization was very successful. Future development would, however, depend on the consistency in adhering to the principle of the market mechanism. During the first two-three years of economic transition (1990-92), the government initiated many microeconomic measures, e.g., tax reform, price liberalization, and social security and health care restructuring to enhance human development. The population growth rate in the Czech Republic has been high compared to other four countries (0.2% for 1960-93), but it has been tapering off and was at a slightly negative growth rate of 0.1% for the 1990-95. The overall Gini coefficient is registered at 26.6, reflecting the least income inequality among the five countries. However, with female labor force equal to 47% of the total labor force, female workers share only 38.1% of the total income, reflecting that the Czech has the highest index of gender income inequality among the five countries. In the area of health care, the Czech Republic has the lowest infant mortality rate and highest life expectancy rate of all transition economies.

5. Poland

The "Theses" of a commission of economists published in 1956-7 was probably the evidence of the earliest reform effort in Poland. It pointed out the lack of price system as criteria for central government decision making and for designating the responsibility at the actual production level (T. Wolf 1991). In 1971-2, a more comprehensive reform program was launched with a main objective of improving the workability of the central planning system by providing a set of parameters such as exchange rate, prices, interest rates, and subsidies (T. Wolf 1991, p. 47). In the 1979-82 period when the economy was on the verge of collapsing, the general consensus of the reformers was that the on-going reform, which had its main focus on enterprise self-management and finance, was moving too slowly. By the 1980s, Poland was very similar to Hungary where the reform has been in progress during the planning regime. Failure in agriculture

policy and the subsequent inflation^x forced the Polish government to take drastic actions. A stabilization and liberalization program backed by the IMF and the World Bank was introduced on January 1, 1990 with the following five key components in this program: (1) contraction of money supply and high interest, (2) austere fiscal policy by eliminating budget deficit, (3) price liberalization, (4) trade liberalization with a single exchange rate and convertibility, and (5) elimination of the income policy (Balcerowicz, Blaszczyk, and Dabrowski, in Woo 1997, p.140). Within six years the tax revenue had jumped to equivalent to 47.2% of the GDP and even though the government expenditure also increased to 49.8%, the budget deficit (equivalent to 7% of GNP in 1989) was reduced from 6.0% of GDP in 1989 to 2.6% of GDP in 1995. The monetary and credit controls were also implemented but the execution was quite volatile.

Polish reform effort also took shape in institutional and social reform, privatization of the state owned enterprises, the customs law and the tax law, civil code, pension plan adjustments and the opening of the capital market. Privatization of large and medium size enterprises turned out to be a slow and difficult task, with company insiders forming private business and stripped the assets off large public sector enterprises. Small businesses were easier to privatize. More than 70% of state owned enterprises were supposed to be privatized either by direct privatization or by liquidation process, yet as of the beginning of 1996, less than 20% of state owned enterprises had completed the privatization process (Balcerowicz, Blaszczyk, and Dabrowski, p.148). However, the emergence of small and medium size private enterprises is by leaps and bounds and there were more than 1.7 million privately owned businesses. The share of the private sector already exceeded that of Hungary at 55.6% in 1994.

The Polish experience shows that radical transition can succeed in areas such as the elimination of commodity shortage, the convertibility of the currency, and the privatization of small and medium size enterprises. But the privatization of state owned enterprises remains a

^x Because Polish farm land, unlike other Eastern European countries, had remained at private hands and was small in size, food production did not catch up with urban demand and farm subsidies and their removal had actually added the inflation pressure. (Wellisz, 1991, p. 212).

difficult matter.

VI. Conclusions

The success and the failure of any transition economy depends upon the historical, social, and political institutions as well as the determination and consistency of policy makers in pursuing the goals of transition. The empirical estimates provided in this study, even though primitive, have substantiated some important theoretical propositions. Even though successes have occurred in politically liberated countries such as the Czech Republic and Hungary as well as in China where political liberalization had barely began, coordination and adjustment seem to be the key. There has been a very obvious common trend toward income inequality as these transition economies continue their reform endeavor. The Asian miracle of “growth with equity” somehow does not seem to have occurred among these transition economies. An immediate task for further research should be in the direction of obtaining comprehensive and credible statistical data and in compiling data which can appropriately serve as proxies of important institutional variables. Another viable further research for the transition economies would naturally point toward the direction of dealing with the inadequacy concerning the promotion of human development, and this should be made possible once the first task is completed.

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