# The Effect of Trade Liberalization on Gender Equality in Central Europe

April 25, 2011

**Patricia Haynes** 

#### Abstract:

Central and Eastern European countries pursued trade liberalization as a part of the transition to capitalism in the late 1980s and early 1990s. This study analyzes the effect of these policy changes on gender equality, as measured by employment data across sectors in Hungary, Poland, Slovakia, and the Czech Republic. As transition moved along, the industry sector, which is linked closely to trade, lost value and decreased employment while the services sector expanded and increased employment. These trends were amplified as each country increased their trade levels. Across all CEE countries, the services sector employed a large majority of the female workforce, while the male workface was principally employed in the industry sector. Given these distributions, it appears that trade liberalization negatively impacted male employment in CEE countries, while the female workforce was shielded from the effects of trade liberalization. Meanwhile, unemployment rose for both genders during transition, rising slightly higher for women.

#### Introduction:

This research paper will evaluate the effect of trade liberalization on gender inequality and social relations in the transitioning economies of Eastern Europe, specifically Hungary, Poland, Czech Republic, and Slovakia. Since many aspects of these

economies were liberalized in conjunction with trade policy, it cannot merely be assumed that a change in employment can be attributed to trade liberalization.

Therefore, I correlate the expansion or contraction of certain sectors with trade liberalization and compare those changes with the presence of women in those industries. This method will reveal a more reliable relationship between trade liberalization and gender equality. For example, if trade liberalization led to the expansion of a country's agriculture industry, where the vast majority of women are employed then it could be concluded that trade liberalization had a positive effect on gender equality.

Since the transition process has no clear end date, and certainly not a uniform end date, I will seek to analyze the most immediate effects of trade liberalization on gender equality, roughly from 1989-1993, though for some countries it began earlier.

**Hypothesis:** Due to the higher proportions of women working in the services sector throughout transition and of men working in the industry sector, women will gain relative to men as the industry sector will suffer from trade liberalization and the services sector will be shielded from trade liberalization.

#### Literature Review:

Much of the existing research that is closely related to this topic focuses on different regions. Stephanie Seguino has published numerous articles on this topic, often focusing on Newly Industrialized Countries, especially those in Asia. In one study focusing on Korea and Taiwan, she finds that higher capital mobility has led to higher

wage inequality (lower wages for women), while increased FDI has led to increased wages for women. <sup>1</sup>

Seguino has also evaluated these changes within developing countries. In one study, she formulates several policy recommendations that could lead to higher gender equity in developing countries, particularly those employing export-led growth. She recommends that countries attempt to raise productivity in female-dominated sectors, promote industries with higher wages, and pursue full-employment by increasing demand.<sup>2</sup> She also uses an important tool of analysis in gender equality: balance of bargaining power. While this paper evaluates similar issues in different regions and economic systems, Seguino's studies do have important implications in that she analyzes state macroeconomic policies that may also be important in determining the effects of trade liberalization.

Other research that does focus on transitioning economies of Eastern Europe and gender inequality takes a different economic focus. Elizabeth Brainerd evaluated the changes in wage differentials between genders following the transition, but do not link this to trade liberalization policies.<sup>3</sup> John Micklewright and Anthony Atkinson completed a study about the distribution of income in transition economies, but do not focus on the

<sup>&</sup>lt;sup>1</sup> Stephanie Seguino, "Export-Led Growth and the Persistence of Gender Inequality in the Newly Industrialized Countries," in *Economic Dimensions of Gender Inequality: A Global Perspective* ed. Janet M. Rives and Mahmood Yousefi(Westport, CT: Greenwood Publishing Group, 1997).

<sup>&</sup>lt;sup>2</sup> Stephanie Seguino, "Gender Equity and Globalization: Macroeconomic Policy for Developing Countries," *Journal of International Development* 18, no. 8 (2006).

<sup>&</sup>lt;sup>3</sup> Elizabeth Brainerd, "Women in Transition: Changes in Gender Wage Differentials in Eastern Europe and the Former Soviet Union," *Industrial and Labor Relations Review* 54, no. 1 (2000).

distribution between genders and also do not link this to changes in trade policy.<sup>4</sup>
Furthermore, Gillian Pascall and Nick Manning conducted research on the changing social welfare states of Central and Eastern Europe and the former Soviet Union as they relate to gender. Their conclusions that the gradual breakdown in the social welfare state disproportionately affected women could also be linked to more liberal trade policies.<sup>5</sup>

#### Data Sources:

The data used for this study will be principally taken from the European Board for Reconstruction and Development. The EBRD has Transition Indicators that rank each formerly Communist country on the extent of liberalization in various categories, such as price liberalization, privatization, and, most important for this study, trade and foreign exchange system. A ranking of 1.00 indicates a high level of central planning while a ranking of 4.00 indicates more liberal economic policies. This data is available from 1989 through 2010. While this measure of each country's policies is useful, it only measures potential trade rather than actual trade. Other data sources will provide a more accurate portrayal of each country's trade levels.

For employment statistics, the World Bank has collected information on unemployment in these countries dating back to 1990. It segments this information by gender, sector, and education levels. The three sectors that it mainly collects data for are agriculture, services, and industry. Agriculture includes forestry, fishing, and hunting;

<sup>4</sup> Anthony B. Atkinson and John Micklewright, *Economic Transformation in Eastern Europe and the Distribution of Income* (Cambridge: Cambridge University Press, 1992).

<sup>&</sup>lt;sup>5</sup> Gillian Pascall and Nick Manning, "Gender and Social Policy: Comparing Welfare States in Central and Eastern Europe and the Former Soviet Union," *Journal of European Social policy* 10, no. 3 (2000).

services include wholesale and retail trade, tourism businesses, real estate, communications, and all personal or business services; and industry includes manufacturing, construction, mining, electricity, and gas. Since the World Bank does not have unemployment data by gender for this time, unemployment data is provided by the European Commission's Employment Observatory, which produced a report with these figures for 1989-1994.

The World Bank also provides data on each country's trade levels. These statistics include trade as a percentage of GDP, net trade in goods (current USD) and net trade in goods and services. The first measure will be used to correlate the expansion of a country's international trade following transition with the rise or fall in the value added of each sector. The data on net trade in goods and goods and services is also useful in determining what portion of a country's trade was services and what portion was solely goods.

#### **Pre-Transition Employment Patterns:**

Due to the economic and social similarities across the four countries of this sample, numerous generalizations can be made in terms of pre-transition employment patters and trade policies. Of course, some differences among this sample do exist and will be noted, but it is also important to note that these similarities may not exist across other CEE or CIS countries.

As in most of the Communist bloc, there was very low unemployment in the sample countries prior to transition. This applied to women as well. De jure segregation was very limited due to the theoretical tenets of Communism, though in reality,

segregation did exist in many areas of society. Disparate education levels especially contributed to employment differentials. <sup>6</sup>

CEE women enjoyed extensive social welfare advantages that attempted to shield them from poverty and give them increased professional flexibility. Most of these policies were geared towards allowing women the freedom of having and rearing children while still being able to have a successful professional career. CEE countries generally had policies of 2-5 years paid maternity leave following the birth of a child, and most also guaranteed women employment upon re-entering the labor force. However, these policies did not prevent unemployment among women with children, as the harsh realities of re-entering the labor force were not as optimistic as policymakers purported.<sup>7</sup>

While there were some areas in which women did not have the same advantages as men, women seemed to overachieve in education. According to a survey taken in 1988, women, particularly those under 45, were more likely to be educated than man, especially at the high school level. The data indicates that women reached parity with men in education around 1980. The only area where this was not the case was vocational schools, in which men out-performed women.

Despite these statistics, discrepancies still occurred. For example, there were stark differences in the kinds of majors that men and women chose, leading to segregation in various employment sectors and income. Women tended to choose majors in the humanities whereas men were more concentrated in math and sciences. Furthermore,

<sup>&</sup>lt;sup>6</sup> Eva Fodor, "Gender in Transition: Unemployment in Hungary, Poland, and Slovakia," *East European Politics and Societies* (1997).

<sup>&</sup>lt;sup>7</sup> Eva Fodor, "Family Policies and Gender in Hungary, Poland, and Romania," *Communist and Post-Communist Sutdies* 35, no. 4 (2002).

women were scarcely seen in the upper echelons of academic administrations, making it difficult to correct gender imbalances. Women as administrators or teachers were more concentrated at the elementary and secondary educational levels, whereas men dominated in these positions at the higher education level. <sup>8</sup>

Beyond women's status in the education sphere pre-transition, women in Communist countries like Poland also tended to be more politically active than their Western counterparts. However, as this relates to Parliamentary participation, throughout the course of Communist Poland the number of female MP's tended to drop as the Parliament gained more power. This seems to indicate that the female presence in Parliament was for mostly symbolic reasons. Supportive of this idea was the existence of a fixed quota system in CEE countries that dictated the level of women that should be guaranteed in parliaments. Therefore, the level of women's representation pre-transition was not a very accurate portrayal of the status of women in politics and social attitudes towards them. Because of this, the level of women in Parliament drastically declined following 1989.

The data on female employment by sector prior to 1990 in English is scarce, though it is available in the domestic language. Gender equality was not really considered by scholars until after the revolutions when human rights and equality in general become a major topic of debate. Therefore, I will only evaluate trade liberalization's effect on gender equality from 1990 onwards, while keeping in mind women's general position within society before 1990.

<sup>&</sup>lt;sup>8</sup> Barbara Lobodzinka, "Polish Women's Gender-Segregated Education and Employment," *Women's Studies International Forum* 23, no. 1 (2000).

<sup>&</sup>lt;sup>9</sup> Fodor, "Gender in Transition: Unemployment in Hungary, Poland, and Slovakia."

These sample countries also had high labor force participation rates among women and low wage discrepancies prior to transition. For example, Hungary's labor participation rate was around 70% for women with the wage differential being around 11%. Women enjoyed high levels of political participation as well as a supportive welfare system that sought to eliminate gender discrepancies by granting significant maternal leave policies. <sup>10</sup>

Differences in education, particularly at the university level, however, made it difficult for women to access the upper levels of management and probably accounted for much of the wage disparity. Moreover, although women voted and even served in parliaments, it was rare that a woman was seen in any position of political power, including university-level administrative positions, which made it difficult for women to control the issues and policies that were addressed in civil society.<sup>11</sup>

## Pre-Transition Trade Policies:

Before the revolutions of 1989, trade policy in CEE countries was intricately linked to the Soviet Union. Central and Eastern European countries chiefly traded with one another and the Soviet Union. Moreover, CEE countries received numerous economic benefits from the Soviet Union. These often came in the form of discounted oil and other consumer goods. These policies were regulated within the Council for Mutual

<sup>&</sup>lt;sup>10</sup> Liba Paukert, "Economic Transition and Women's Employment in Four Central European Countries, 1989-1994," *Employment Department, International Labour Office* (1995).

<sup>&</sup>lt;sup>11</sup> Lobodzinka.

Economic Assistance (CMEA). It is necessary to understand these policies in order to analyze what the fall of the Soviet Union meant for the trade regime in these countries.<sup>12</sup>

Perhaps the most important way that CEE trade policies were affected by its relationship with the Soviet Union was the price at which the Soviet Union sold it oil. While the process by which the Soviets determined the sale price was very complicated and not always clear, it has been estimated that just prior to transition, Poland, for example, was paying an average of \$34/barrel less than the world price for oil. This means that consumer and manufactured goods were much cheaper to produce than if they had been faced with the world market oil price.<sup>13</sup>

Another way in which the relationship with the Soviet Union affected trade policies was the use of the transferrable rouble (TR) in trade rather than the dollar. Using the TR in import-export pricing shielded importers and consumers from fluctuations in the world market, most important price increases. A more straightforward policy of import-subsidization was also widely implemented in which the Soviet Union sold discounted consumer goods to its Communist partners.<sup>14</sup>

Furthermore, the use of the transferrable rouble made it much easier for CEE and CIS countries to trade with one another rather than trading with the outside world and facing undesirable exchange rates. This meant that these countries did not have a real economic incentive to liberalize trade, as they faced lower transactions costs by only trading with each other.

<sup>&</sup>lt;sup>12</sup> Dani Rodrik, "Making Sense of the Soviet Trade Shock in Eastern Europe: A Framework and Some Estimates," *NBER Working Paper* 4112, no. (`1992). <sup>13</sup> Ibid.

<sup>&</sup>lt;sup>14</sup> Ibid.

#### Trade Liberalization:

Some variations in trade policy existed among the sample countries depending on when that country began its liberalization in relation to the time of revolution. For example, Hungary's trade liberalization was slightly different than other countries in this sample in that its 1989-level of liberalization was higher than most. While the EBRD gave most transition countries 1.00 ratings for 1989 (meaning a high level of central planning), Hungary began its liberalization process at a 2.00 rating for trade and foreign exchange systems, with 2.67 rating for price liberalization. It's trade rating increased to 3.00 by 1990 and to a 4.00, indicating full liberalization, by 1991.

This accelerated liberalization is mostly like due to the "Goulash Communism" that was employed in Hungary, in which certain liberal policies, both political and economic, were gradually introduced as a part of Communism. The Kadar government responded to reform movements as early as the 1960s, which meant that Hungary had one of the smoothest transitions of all the CEE countries. In 1966, the Central Committee introduced the New Economic Mechanism, which liberalized Hungary's economic policies and sought to make its industry more competitive with the world market. Hungary's revolution was also completed earlier than most other transition countries as Kadar was replaced in 1988 by a reform Communist leader. <sup>15</sup>

As a part of these reforms, the Hungarian government sought to make consumer goods more readily available to the public. Hungary was one of the earliest countries to initiate these reforms, so it experienced a high level of tourists from other Central and

\_

<sup>&</sup>lt;sup>15</sup> Patrick H. O'Neil, "Revolution from Within: Institutional Analysis, Transitions from Authoritarianism, and the Case of Hungary," *World Politics* 48, no. 4 (1996).

Eastern European countries. The everyday pains of empty supermarket shelves and long lines did not exist in Hungary during the 1970s and 1980s, so travelers from other Communist countries, for whom it was difficult to travel to Western Europe, came to Hungary.

Because Hungary began its reforms early, the economy began to shift employment toward the services sector earlier than other transition countries. From 1985-89, employment in services increased from 37% to 41%, while agriculture gradually declined. Therefore, it was not 1989 that was the transition point, for Hungary but earlier in the decade when it began its more gradual process of transition.

In terms of a sector analysis of Slovakia before the transition era, it had a much more dominant industry sector than its CEE counterparts. While other countries began expanding their services sector before the transition process began, Slovakia's industry sector remained the driving force of its economy throughout 1980s. The value added of the industry sector began at 61% of GDP in 1985 and remaining fairly constant until after the transition. The services sector, however, was not as profitable as the industry sector as its value added was 31.9% in 1985 and also remained constant until the time of transition. While other countries had a more equitable distribution between services and industry, pre-transition Slovakia predominantly relied on its industry sector.

Furthermore, trade was a much lower portion of Slovakia's GDP than it was for many other CEE countries. It began at 68% of GDP in 1987 and decreased gradually as it moved closer to the transition point. The decrease in Slovakia's trade as a percentage of GDP is linked to the slight decrease in the value added of both the industry and services sector from 1989-1991. These movements may reflect the external shock of liberalization

that occurred at this time in its neighbors, and probable trading partners, such as Hungary and Poland.

Due to the nature of Poland's revolution, many of the changes in economic policy happened almost immediately after Solidarity took over and held parliament elections. Because of this, Poland liberalized their trade regime almost immediately, jumping from a 1.00 to a 3.00 on the European Board of Reconstruction and Development's Transition Indicators between 1989 and 1990. Furthermore, there was the dual shock of the loss of benefits from the CMEA relationship and the change in government trade policies that happened almost simultaneously.

The change from the TR to the use of the dollar (USD) in 1990 in import-export valuation affected each country's terms of trade. According to an analysis done by Daniel Rodrik, this led to an approximate decrease of \$1.9 billion in Poland's terms of trade.

Also in Rodrik's study, he estimates that the removal of the import subsidy account for a \$0.67 billion loss in Poland. His aggregate estimate is that the Soviet Union trade shock cost Poland approximately \$2 billion. 16

The most significant way that the collapse of the Soviet Union impacted Poland economically, at least in terms of their trade position, was through the losses associated with the elimination of the discounted oil prices. Therefore, it can be postulated that the industries most affected by the trade shocks were those most reliant on energy. Since agriculture had not yet evolved into an energy-centric sector, for the purposes of this analysis, it will be assumed that industry was the sector most dependent on energy sources.

-

<sup>&</sup>lt;sup>16</sup> Rodrik.

Using 1989 as a base year, Hungary's existing trade surplus essentially disappeared during transition. Exports began at 36% of GDP with imports at 32%, but both measures reached 31% by 1992, clearing the previous surplus, though not creating a deficit. The increase in imports was necessary in order to support the growing domestic demand for consumer goods. This would benefit the services sector as it helps promote the growth of retail businesses and attracts tourism. Conversely, the decline in exports reflects a decrease in global demand for Hungary's manufactured goods, which are a part of the industry sector. More accurately, this is due to the loss of the market access of the Soviet Union and the Communist bloc and the increased competition of the world market.

The experience in the Czech Republic was slightly different than the two previous countries due to a much heavier reliance on trade. At the time of transition, the Czech Republic was trading approximately 87% of its GDP. This figure grew throughout the transition process, reaching 110% in 1993. This means that as a society, the Czech Republic was trading more than it was producing domestically, creating a trade deficit. By 1993, its balance of payments (measured in current USD) reached -\$516,925,516, meaning that it was importing a much higher value of goods and services than it was exporting. While this was in principle true in most CEE countries, the Czech Republic was importing at a much higher rate than most other transition economies.

Slovakia had perhaps one of the clearest indicators of transition according to its trade data. While other countries, such as Hungary, transitioned gradually, making it difficult to identify the point at which the effects of liberalization were felt, Slovakia's trade data shows a clear transition point in 1991-1992.

This is consistent with the EBRD's Transition Indicators assessment of Slovakia. While most transition countries saw an increase in its transition index between 1989 and 1990, Slovakia did not experience any significant trade liberalization until 1991, when its trade and foreign exchange systems index increased to 3.00. In fact, it was not until 1999 when all of its indicators increased from 1.00, which indicates a highly centrally planned system. The fact that Slovakia increased from a 1.00 to a 3.00 for its trade and foreign exchange systems in one year's time indicates that although it began transition later then other CEE countries, it made swift policy changes in this area.

As represented by the EBRD's Transition Indicators, 1991 brought significant changes to Slovakia's trade regime. While trade was only 62% of GDP in 1990, (and had previously been decreasing), it increased to 95.6% in 1991 and 144% of 1992, which meant that Slovakia was importing more than half of its domestic production. Naturally, Slovakia was facing a growing trade deficit by 1992.

## Empirical Analysis of Trade Liberalization and Women's Employment:

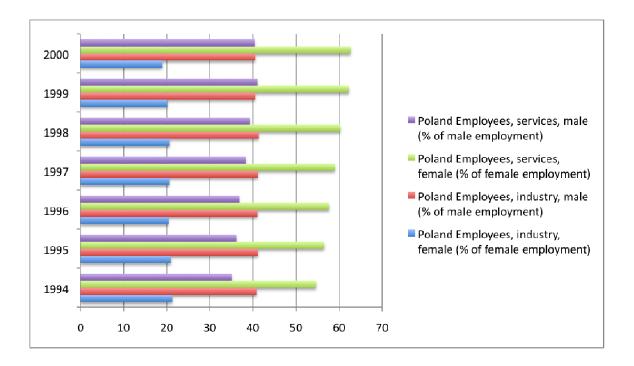
The question that this study attempts to answer is how the aforementioned trade liberalization policies impacted women's employment. More specifically, this section will look at how the distribution of labor across the three sectors (industry, agriculture, and services) relates to the success of each sector during the transition period and further, how that success correlates to the degree of trade liberalization.

In 1990, Poland's labor force was split relatively evenly between industry (37%), services (35.8), and agriculture (25.2). Since the World Bank did not always collect gender-specific data, this analysis will focus on the earliest years available, usually 1993.

The only sector that had a predominantly female labor force was services; with agriculture being more equal and industry having a majority male labor force.

(Figure 1.1)<sup>17</sup>

Figure 1.1:



Following the trade liberalization of 1990, Poland's production seemed to shift away from industry and towards services. Employment in industry decreased steadily from 1990 (37%) to 1994, where it leveled off at 31.9%. While employment in its agriculture sector remained constant, employment in services increased steadily from 1990 (35.8%) to 1994 where it was 43.9%, and continued to rise since then.

These shifts in sector-specific employment cannot be attributed solely to trade liberalization as many other economic policies were being changed simultaneously.

However, there are several trade-related factors that can account for these shifts. First, the

<sup>&</sup>lt;sup>17</sup> "World Development Indicators," ed. World Bank (2011).

loss of oil subsidies and increase in oil prices following 1989 would account for some of the loss in employment in the industry sector. Value added in the industry sector as a percent of GDP declined drastically in the years following transition from 50.1% in 1989 to 40% in 1992 and continued to decline. Furthermore, value added in the services sector increased from 41% of GDP in 1989 to 51% in 1992 and continued to increase.

The way in which these changes can be correlated to gender equality is that the services sector employed a much greater percentage of the overall female workforce than the industry sector. Therefore, the fact that the industry sector was more adversely affected by trade liberalization means that the male workforce was also more adversely affected by trade liberalization. Conversely, the services sector, which employs largely a female workforce, experienced a period of expansion following trade liberalization.

While women may have suffered in other ways, it seems that due to the contraction of the energy-dependent sectors which employed a largely male workforce, women did not suffer as much as men due to trade liberalization policies.

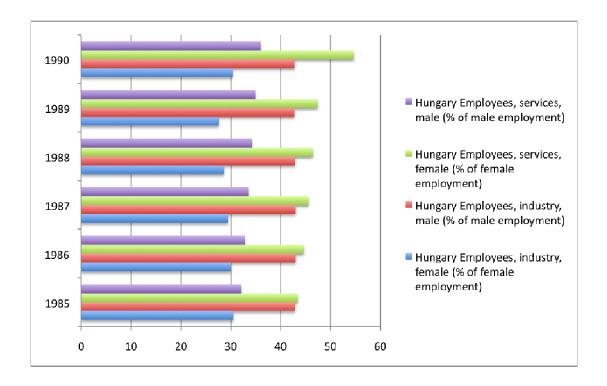
Furthermore, the distribution of the genders across these three sectors means that women were more concentrated in sectors that relied more on domestic consumption. Exports from Poland fell dramatically from 28.6% of GDP in 1990 to 23.5% in 1991, where it leveled off until a slight increase in 1998, probably due to WTO accession. Imports started at 21.5% of GDP in 1990 and spiked briefly in 1991 to 25.4% but then returned back to the 1990 levels with no significant increase 1997.

These statistics mean sectors more reliant on exportation of goods were more adversely affected by the transition. The industry sector, which employed mostly men, is where most exported goods, such as raw materials, would be produced, whereas the

services sector, which relies on tourism, retail, and personal services. Therefore, the opening up of markets and borders benefits those in the services sector (mostly women), while it hurts those in the industry sector.

Hungary's labor force was distributed much more unevenly than that of Poland in 1989, mostly due to its earlier transition point. As of 1989, 45.2% of its labor force was employed in the services sector, with 36.8% employed in industry and 18.2% employed in agriculture. However, the gender distributions were in line with Poland in that services was the sector that employed the majority of female labor force participants, 54%, while industry employed 30.4% of the total female labor force with agriculture employing 15%. These numbers mean that Hungary employed slightly higher percentage of women in industry and a lower portion in agriculture than Poland. (Figure 1.2)<sup>18</sup>

Figure 1.2:



<sup>&</sup>lt;sup>18</sup> Ibid.

This shift in economic activity is reflected in the value added data for each sector. The value added of the services sector, as a percentage of GDP, rose from 40.6% in 1989 to 57.9% in 1992 and continued to rise until it leveled off at approximately 60% for the remainder of the decade. Meanwhile. The value added of the industry sector began at 43.6% in 1989 to 34.5% in 1992, leveling off at 32% for the remainder of the decade. The value added of the agriculture sector also suffered, decreasing from 15.6% in 1989 to 7.5% in 1992, though it was a less significant portion of Hungary's economy.

These changes in the value added levels for the three sectors of Hungary's economy are not only a result of trade liberalization. However, the differing natures of the three sectors means that trade affects each differently. Since manufactured goods, which comprise a significant part of Hungary's exports, are included in the industry sector, it is likely that at least some of the contraction of this sector is due to trade liberalization. Services, however, are very rarely traded on the world market. Therefore, as services employed the majority of the female labor force, while industry employed largely men, it was women that gained relative to their male counterparts through trade liberalization. More accurately, it was privatization and the expansion of consumption that more directly benefited the female workers in the services sector, but the nature of their employment shielded them from the adverse effects of trade liberalization that men in the industry sector experienced.

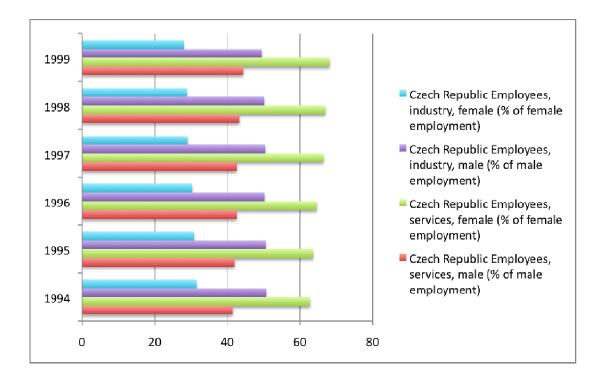
During the time immediately after the beginning of transition, it appeared that the Czech industry sector would be able to compete on the world market. It's value added (as a percent of GDP) rose from 48% in 1990 to over 50% in 1992. However, as the trade

deficit ballooned, the industry sector contracted, with its value added decreasing to 42% in 1993 and continuing to fall. The services sector experienced the opposite phenomenon as its value added fell slightly during the early transition period (from 45% to 44%), but then, as the industry sector contracted, the services sector expanded to 52% value added in 1993. The trajectory of the value added of these sectors is closely linked to the trade deficit and balance of payments. Meanwhile, the value added of the agriculture sector fell steadily throughout transition, much like Hungary and Poland.

The data for employment by sector is not available until 1993, which is when the Czech Republic experienced the major shift in its trade regime. At this time, the majority of employees (49.3%) were employed in services, reflecting the expansion of this sector due to trade liberalization, while 42.9% were employed in industry. Given the data for the value added of these sectors from 1989-1993, it can be assumed that employees in industry had decreased while employees in services had increased. These patterns can be seen going forward, as services employees continued to increase and industry employees continued to decrease, both by small margins. (Figure 1.3)<sup>19</sup>

<sup>19</sup> Ibid.

Figure 1.3:



Similar to Hungary and Poland, the services sector in the Czech Republic relied heavily on female labor, employing 61% of the female labor force and 40% of the male labor force as of 1993. The industry sector employed 51.1% of the male labor force and 32.6% of the female labor force. The agriculture sector, having already experienced a contraction, employs a negligible portion of the labor force. From the rapid changes of the 1989-1992 time period, these numbers continue along their trajectory in a much more gradual way. However, rather than women becoming more dominant in services, the changes are realized equally between the genders. The services sector, given its expansion, employs a greater number of total employees, though the ratio of women to men remains constant. The industry sector, due to its contraction, employs a smaller portion of the total labor force, but the proportions also remain the same.

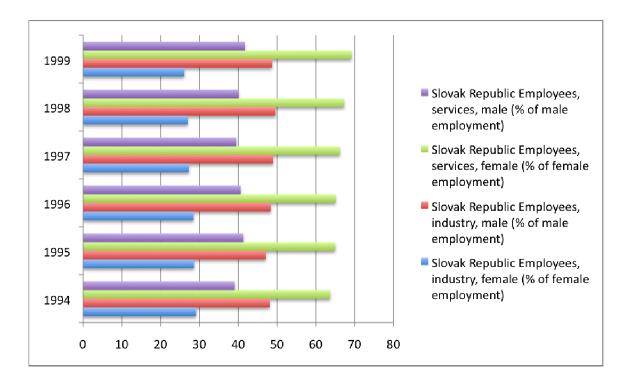
This means that in the short run, the trade liberalization benefitted women in that it expanded the services sector, which employs the majority of the female workforce. However, it appears that trade liberalization did not have as negative an effect on the male workforce as it did in other CEE countries, such as Hungary and Poland. While the industry sector, which is male-dominated, did contract and probably led to male unemployment, the expansion of the services sector allowed for many of these unemployed workers to find jobs. Because of this expansion, both male and female unemployment decreased in the time following 1993. Therefore, in the long run, the effect of trade liberalization on men and women is almost equal.

In Slovakia, the distribution of gender employment across sectors is similar to that of the Czech Republic. (Figure 1.4)<sup>20</sup> However, throughout transition, the distribution does not seem to change significantly. Women remain the majority of employment in the services sector, though this does not increase significantly with liberalization.

Conversely, men's employment in industry does not change significantly either. This could perhaps be a function of the data available for Slovakia. Employment by gender is not available until 1994, so it is possible that the changes due to transition took place before then, and the employment by sector reached equilibrium by 1994.

<sup>20</sup> Ibid.

Figure 1.4:



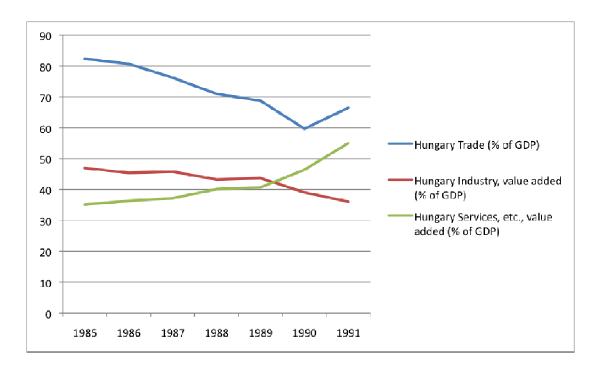
# **Trade-Value Added Correlation by Sector:**

To further solidify the link between trade liberalization, I will also correlate the rise or fall in the value added of the industry and services sector with each country's trade levels as a percentage of GDP. Evaluating the comparisons between these statistics will reveal a closer relationship between the expansion of trade and its effects on the success of these two sectors. This correlation will be done for each country individually as each country had a unique transition time period.

While Hungary's trade policies began getting more liberal as early as 1985, its trade as a share of GDP actually decreased as the transition process moved along. While its pre-transition trade levels were 85% of GDP, it decreased to 59% by 1990 and leveled off after that. Of course, Hungary's trading partners probably changed significantly over

this time period, as 1985 saw economic stability in other CEE countries, which had disappeared by 1990. (Figure 2.1)<sup>21</sup>

Figure 2.1:



According to the trade and employment data for Hungary, it seems that my hypothesis was correct and trade liberalization did lead to a contraction in the value added of the industry sector and an expansion in the value added of the services sector. However, it seems that because its actual trade as a share of GDP decreased as its policies liberalized, trade and industry value added are positively correlated for this time period as they both decreased, whereas trade and services value added were negatively correlated. The value added for the industry sector was 46% of GDP at 1985 and had decreased to 39% by 1990. The value added for the services sector was 35% in 1985 and had

24

<sup>&</sup>lt;sup>21</sup> Ibid.

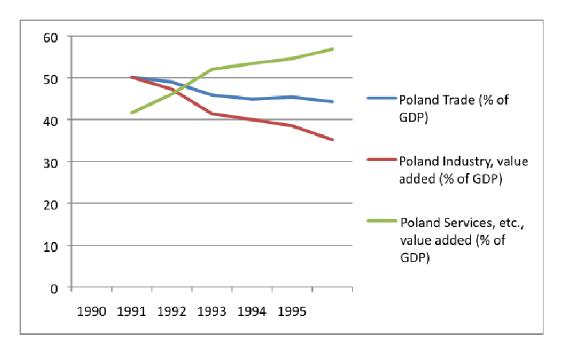
increased to 55% in 1991. The employment statistics reflect these patterns as well (Figure 5).

This discrepancy means that the liberalization of trade policies in Hungary, as measured by the EBRD Transition Index, did not lead to an actual increase in trade for the nation. Therefore, while the process of transition and the liberalization of trade policies increasingly led to an expansion of the services sector and a contraction of the industry sector, it seems that this process also led in a contraction of the country's trade. Because of this, actual trade liberalization in Hungary cannot be correlated to the expansion of women's employment in the services sector.

The data for Poland presents a similar story. Although the process of transition saw an expanding services sector and contracting industry sector, it does not seem that these pattern can be linked to trade liberalization. While Poland's trade policies were becoming more liberal, these changes did not lead to an expansion of international trade. Poland's trade as a share of GDP was 50% of GDP in 1990 and decreased to 45% in 1995. While trade was decreasing, the industry sector was also decreasing and the services sector was increasing. (Figure 2.2)<sup>22</sup>

<sup>22</sup> Ibid.

Figure 2.2:



An interesting pattern that occurs across both Poland and Hungary is that around five years after the beginning of transition (which occurs at different times for each country, earlier for Hungary and later for Poland), they experience a rebound in international trade figures. Trade data for each country in the sample largely returns to their pre-transition levels by this point. This pattern is not reflected in the industry and services sector data as shares of GDP, as those statistics remain on their previous trajectories.

This could be attributed to a couple factors. Domestically, the country's businesses may have learned how to better compete with the international market and the domestic private sector has had a chance to develop and become profitable.

Internationally, the country may have seen better stability in its trading partners, particularly other CEE countries, and thus increased its trade with them. Another

variation on this explanation is that as the countries liberalized and became better integrated into Western Europe, their access to European markets increased.

The Czech Republic and Slovakia have a different experience. For both countries, international trade consistently increased throughout the transition process. Czech trade levels were 87% of GDP in 1990, rose to 105% of GDP in 1995, and continued to rise after that point (Figure 2.3)<sup>23</sup>. Slovakia trade levels began at 62% of GDP in 1990, rose dramatically to 144% in 1992, and leveled off at 113% in 1995 (Figure 2.4)<sup>24</sup>. Similar to Hungary and Poland, the services sector expanded during this time while the industry sector contracted. These cases present much more compelling evidence for my hypothesis that increase in trade led to an increase in the services sector employment, which benefitted women, and a decrease in industry sector employment, which disadvantaged men.

<sup>23</sup> Ibid.

<sup>&</sup>lt;sup>24</sup> Ibid.

Figure 2.3:

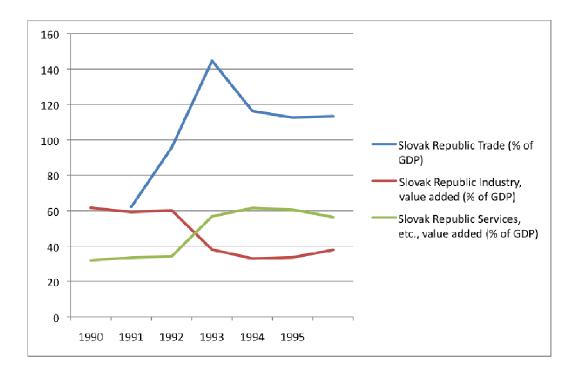
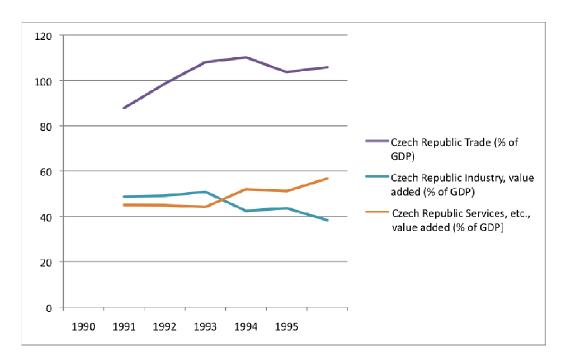


Figure 2.4:



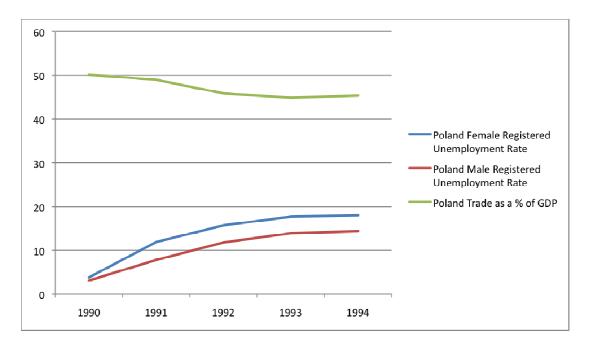
# **Trade-Unemployment Correlation:**

Transition scholars have well established that liberalization and privatization in these economies in the 1990s led to increasing unemployment. Given the nature of transition and the fact that a multitude of government policies were changed at once, it is nearly impossible to determine which policies most directly led to the increase in unemployment.

Because both Poland and Hungary decreased trade throughout the liberalization process, it seems that trade and unemployment had negative correlation. Poland experienced rising unemployment with a decreasing trade share (Figure 3.1)<sup>25</sup>. Moreover, there are significant differences in unemployment across genders in Poland. While men and women start out at the same, relatively low, unemployment rate, the discrepancy grows as unemployment increases at a faster rate for women. By 1993, women's unemployment is approximately 4% higher than that of men.

<sup>&</sup>lt;sup>25</sup> Employment Observatory, *Employment in Europe: Central and Eastern Europe*1996. Vol. 7.

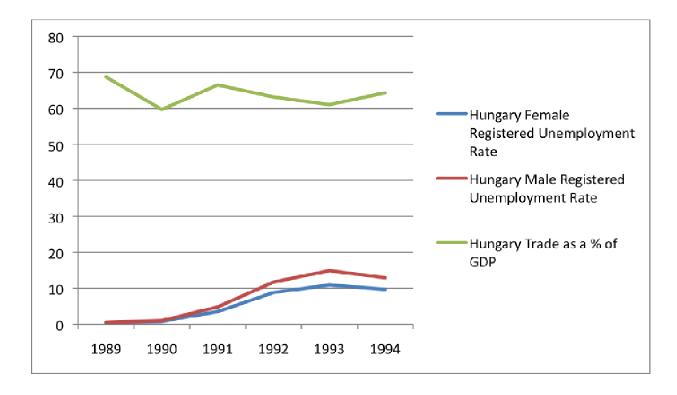
Figure 3.1:



A similar correlation can be seen for Hungary, though its trade pattern is more dynamic. With the decrease in trade from 1989-1990, Hungary also experiences rising unemployment for both genders (Figure 3.2)<sup>26</sup>. Similar to Poland, while unemployment begins at the same point for both sexes, unemployment rises at a faster rate for women, with the difference across genders reaching its highest in 1993. Poland and Hungary also have similar rates of unemployment, reaching above 10% by 1994 for both genders. However, Hungary's trade as a share of GDP rises in 1991, then decreases again until 1993. Because unemployment continues to increase throughout this time, it cannot be concluded that trade had a negative impact on unemployment in Hungary.

<sup>26</sup> Ibid.

Figure 3.2:

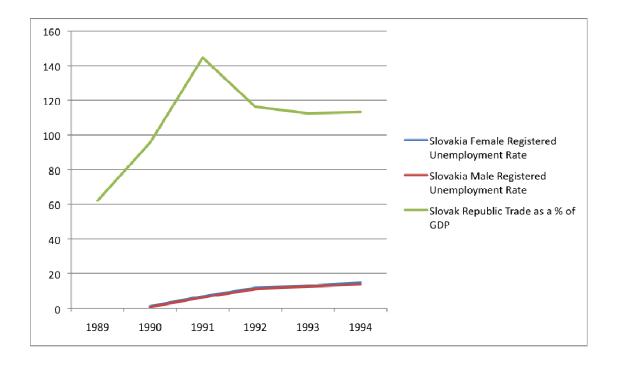


Contrasted to Hungary and Poland, Slovakia's trade as a share of GDP increases steadily immediately following transition from 1989-1991. (Figure 3.3)<sup>27</sup> While Slovakia has similar levels of unemployment as Hungary and Poland, there does not exist the same discrepancy across genders. Unemployment for men and women is roughly equal throughout the time immediately following transition, with women's unemployment only being slightly higher than men's unemployment by 1994. Because the overall increase in unemployment still exists in Slovakia despite its increase in trade, there does not seem to be a close relationship between trade and employment in these countries.

31

<sup>&</sup>lt;sup>27</sup> Ibid.

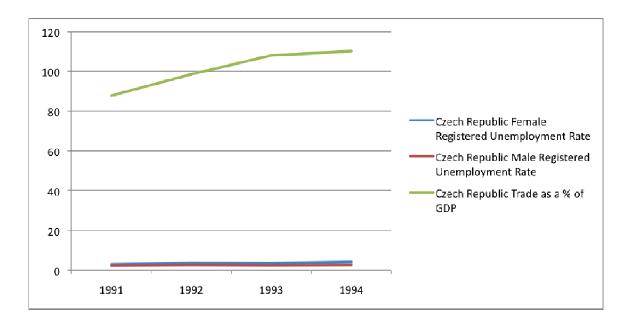
Figure 3.3:



Similar to Poland, there is not adequate trade data for the Czech Republic available in order to graph the relationship between trade as a share of GDP and unemployment. However, the Czech Republic experiences remarkably lower unemployment compared to the other countries in the sample. At the highest, it only reaches 4.1% (Figure 3.4)<sup>28</sup>. The trade data that is available for the Czech Republic indicates that its trade as a share of GDP increased during transition from 1991-1994. Even at its lowest point, trade in the Czech Republic is higher than the other countries in this sample. This may be a possible explanation for its lower unemployment rate. As it was able to better adapt to an open economy and integrate itself into the European economy, its sectors were also better able to adapt to privatization and therefore, though unemployment did increase, it did not experience the same high unemployment as did Poland, Hungary, and Slovakia.

<sup>28</sup> Ibid.

Figure 3.4:



This unemployment and trade data provides several conclusions. First, it does not seem that trade had an integral impact on the discrepancy between male and female unemployment, as evidenced by Slovakia. Rather, it is more likely that domestic labor market policies more directly determined the spread in unemployment across genders. Additionally, it is clear that unemployment rose throughout transition while trade declined. If trade were the only thing changing during this period, it could be concluded that lower trade led to higher unemployment, but it is more likely that privatization and other liberalization policies also had a significant impact on unemployment. Furthermore, because Czech Republic and Slovakia increased trade while Hungary and Poland decreased trade, but all countries experienced increasing unemployment, it can be concluded that trade did not have an impact on unemployment for transition countries.

#### Conclusion and Further Analysis:

The analysis in this study clearly concludes that the process of liberalization undertaken by Hungary, Poland, the Czech Republic, and Slovakia increased the value added of the services sector and decreased the value added of the industry. Because of the employment distributions and the reliance of the services sector on female labor, liberalization advantaged the female labor force and disadvantaged the male labor force. However, the unemployment data indicates that for Hungary, Poland, and Czech Republic, women experienced higher unemployment throughout transition.

This result could be due to societal factors that lead women to be more dominant in the services sector. For example, more jobs in the industry sector would involve manual labor, which men would have the advantage in. The educational patterns in these countries also support this employment distribution. Women in these countries were largely more educated than their male counterparts, which makes them better equipped for service sector jobs, such as real estate, personal and business services, and tourism. The only educational avenue in which men were more successful were vocational schools, which would better equip them for industry sector jobs.

Despite the support for this theory, only two of the four countries in the sample actually expanded international trade with the liberalization of their trade policies. Hungary and Poland decreased trade following the start of transition while trade as a share of GDP increased in the Czech Republic and Slovakia. The decrease in trade in Hungary and Poland may be due to the adjustment period of privatization, though there is not a compelling explanation for why this would explain the difference between Hungary and Poland and Czech Republic and Slovakia.

Further research is necessary in order to fully explore why there are such dramatic differences in international trade levels between these two groups. It could possibly be linked to other domestic policies, or pre-existing differences between the two groups that determined how their economies would react to trade liberalization. Subsequent research is also needed in order to explain the discrepancy between the increasing value added of the services industry and the increasing unemployment among women.

#### Works Cited:

- Brainerd, Elizabeth. "Women in Transition: Changes in Gender Wage Differentials in Eastern Europe and the Former Soviet Union." *Industrial and Labor Relations Review* 54, no. 1 (2000): 138-162.
- Fodor, Eva. "Gender in Transition: Unemployment in Hungary, Poland, and Slovakia." *East European Politics and Societies* (1997).
- Fodor, Eva. "Family Policies and Gender in Hungary, Poland, and Romania." *Communist and Post-Communist Sutdies* 35, no. 4 (2002).
- Lobodzinka, Barbara. "Polish Women's Gender-Segregated Education and Employment." *Women's Studies International Forum* 23, no. 1 (2000): 49.
- Manning, Gillian Pascall and Nick. "Gender and Social Policy: Comparing Welfare States in Central and Eastern Europe and the Former Soviet Union." *Journal of European Social policy* 10, no. 3 (2000): 240-266.
- Micklewright, Anthony B. Atkinson and John. *Economic Transformation in Eastern Europe and the Distribution of Income*. Cambridge: Cambridge University Press, 1992.
- O'Neil, Patrick H. "Revolution from Within: Institutional Analysis, Transitions from Authoritarianism, and the Case of Hungary." *World Politics* 48, no. 4 (1996): 579-603.
- Observatory, Employment. *Employment in Europe: Central and Eastern Europe*, 1996. Vol. 7.
- Paukert, Liba. "Economic Transition and Women's Employment in Four Central European Countries, 1989-1994." *Employment Department, International Labour Office* (1995).
- Rodrik, Dani. "Making Sense of the Soviet Trade Shock in Eastern Europe: A Framework and Some Estimates." *NBER Working Paper* 4112 (1992).
- Seguino, Stephanie. "Export-Led Growth and the Persistence of Gender Inequality in the Newly Industrialized Countries." In *Economic Dimensions of Gender Inequality: A Global Perspective* edited by Janet M. Rives and Mahmood Yousefi. Westport, CT: Greenwood Publishing Group, 1997.
- Seguino, Stephanie. "Gender Equity and Globalization: Macroeconomic Policy for Developing Countries." *Journal of International Development* 18, no. 8 (2006): 1081-1104.

"World Development Indicators." edited by World Bank, Accessed March 21, 2011.