THE IMPACT OF TRADE, TECHNOLOGY, IMMIGRATION, AND GLOBALIZATION ON WAGES

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ABSTRACT

Over the past 20 years, worker's wages, especially those in American manufacturing, have been declining. Trade, technological change, immigration, and globalization are the four main factors that are linked to wage inequality. This paper will show, through economic theory and empirical studies, that there is evidence to support the link between free trade, technological change, immigration, globalization, and wage differentials. Though most workers and politicians believe protectionist policies are justified to solve this dilemma, the best course of action is to re-educate and train displaced workers to enable them to participate successfully in the American workforce.

INTRODUCTION

Since the 1970s the wages of less-skilled American workers have fallen in term of real and relative wages compared to more-skilled American workers (Feenstra, 1986). American workers, and those in European countries, like Great Britain, have also seen an increase in earnings inequalities over the past twenty years (*The Economist*, 1998). Few Americans have seen improvements in their living standards over the past twenty-five years. When one allows for inflation, average hourly earnings are lower than in 1973, although taking into consideration increased fringe benefits average annual earnings have risen (1998). The manufacturing industry is the most exposed to the consequences of international competition, whereas non-manufacturing jobs rely on the export of manufactured goods (Cyert, 1987). While imports and exports rose, employment in the manufacturing sector declined by 15 percent (Collins, 1998).

THE RELATIONSHIP BETWEEN TRADE, WAGES, AND EMPLOYMENT

Many people blame free trade with developing countries for wage inequality (Two Tales of Trade, 1997). Free trade or trade liberalization is defined as policies aimed at removing direct barriers to imports. It conforms to three criteria: it is a break with past trade practices, a new direction in trade policy; it is comprehensive, tariff reductions usually affect at least one-third of the total trade volume; and it is politically controversial (Lusztig, 1996). Free trade makes countries specialize in industries where they have a comparative advantage. As trade barriers are lifted, resources are shifted into those industries, and away from less productive ones (*The Economist*, 1998). Expanded trade in manufactures was occasioned by three events:

1.	An abandonment, by developing countries, of protectionist trade and direct investment policies; especially true for the United States in the late 1970s, China in the early 1980s, and Latin America in the mid-1980s.
2.	Because of high rates of investment, an increased manufacturing export capacity, especially in developing countries in East Asia.
3.	Falling transport and communication prices, which encourages trade and multi-national investment (Sachs, 1996).

According to Lee, world output has been growing at an annual rate of four percent since 1950; trade has increased by six percent annually. Trade between rich and poor countries has increased output exported from poor countries from eight percent in 1969 to 18 percent in 1990. These lower trade barriers are coupled with cheaper, quicker transportation and communications, which translates into the easier movement of capital, components, machinery, and even plants. Multinational companies have spread ideas and technology. Companies can manage worldwide operations. Air freight has increased efficiency by reducing the time needed to ship products. Many American-made cars are loaded with Japanese components as well as Japanese-made cars with American components (1997). Imports and exports make up between 10 and 13 percent of the U.S. Gross National Product (GNP), (Collins, 1998).

In her article, Lee writes that Richard Cobden, the nineteenth century British liberal, is the instigator of the increase in the freer trade our economy has been experiencing over the last century. Between 1839 and 1846, Cobden influenced the

British Parliament to repeal the Corn Laws. The Corn Laws were tariffs that were designed to protect British grain, but actually protected rich land barons and hurt the middle and working class for whom bread was a staple. He promoted free trade between France and the United Kingdom with the Cobden-Chevalier Treaty of 1860, which marked the beginning of a 53-year period of economic well being. The results of Cobden's efforts were far reaching. In the second half of the nineteenth century, 15 million people immigrated to the United States. During the 1880s, the United States accepted more immigrants than any previous decade. Capital emigrated also. British money financed railroads in the United States and Argentina, tea gardens in India, and created the economies of Hong Kong and Calcutta. In 1871, London absorbed over $100 million of United States' securities, and in 1893, foreigners sent $3 billion to the United States (1997).

When trade barriers were first lowered in the nineteenth century, global well being improved. Price equilibrium took effect. In comparing Liverpool and Chicago in 1870, grain prices, along with beef, pork, mutton, butter, cotton textiles, tin, copper, hides, and cotton were 60 percent higher in Liverpool than in Chicago. By 1912 Liverpool prices exceeded Chicago's by 10 percent. Farmers in the United States and Canada were just starting out, so Britain could eat more meat and North Americans could wear better clothes (Lee, 1997). The living standards gap between countries began to close also. Ireland and Sweden made great strides from the Great Famine to World War I. All countries grow faster and experience higher living standards because of freer trade. Countries can specialize in their comparative advantage. The global hand promotes earning equality within poor countries. Their living standards rise faster than in richer countries, closing the gap between them (Lee, 1997). Another example of a benefactor of freer trade is Japan. Japan was poor in the 1920s and 1930s, even though it had a strong military. Japan began exporting toys, a low-skill product, then medium-skill electronic goods, and finally went on to high-skill manufactures like luxury cars. Japan exported its textile and toy industries to poorer countries making them richer. Japan now has the second highest per capita income among industrial democracies (Lee, 1997). Lee gives South Korea as another example of the benefits of free trade. South Korea only exported wigs and toys after World War II and eventually moved on to steel, ships, cars, and semiconductors. Annual income went from $87 in 1967 to $10,076 in 1995 (1997). According to Joseph Quinlan, a Dean Witter economist, 1985 marked the turning point with trade. Japan, the United States, and Germany sent a large amount of money abroad to developing countries, mostly in Asia (Lee, 1997).

The debate surrounding free trade has traditionally revolved around two questions: does freer trade result in faster economic growth? And how does freer trade affect income distribution? The answers to these questions are hard to discover because of data limitations. It is difficult to gather data pertaining to total factor productivity, growth, and social conditions for large groups of countries (Edwards,

1997). There is circumstantial evidence linking international trade and wage inequalities. Mainly the timing of United States-developing countries trade in manufactures and the widening of wage gaps in the United States; both beginning in the mid to late 1970s (Sachs, 1996).

It is easy to blame trade for worker's problems. The benefits of trade seem to be spread out more than the losses. A local factory closing or layoff are more obvious than the across-the-board effects of increased consumer spending power because of cheaper imports, or higher productivity resulting from greater competition (*The Economist*, 1998). Trade benefits the American economy as a whole, but may hurt low-skilled, low-wage workers (*The Economist*, 1998). According to Collins, trade has a very small effect on wage inequality as a whole. Only about one-third of the increase in inequality can be attributed to differences between workers, whether in education or gender. Only seven percent of wage inequality can be attributed to trade (*The Economist*, 1998). In another publication, Collins writes that before World War II free trade was the exception, protectionism the rule. This occurred for two reasons: first, custom duties made up a significant share of federal revenues and the view of the American public. Second, protectionism reduced real wages and the standard of living.

Economists take various viewpoints when it comes to the effect of trade on wages and employment. In their book, Litan, Lawrence and Schultze write that if United States' competitiveness has an effect on the American standard of living, it is not due to the trade deficit or higher unemployment. It is due to the requirement of the United States to increase the resources relinquished to obtain a given quantity of imports. Except for 1973-1979, American terms of trade have not had much influence on American living standards (1988). Trade economists argue that trade affects wages through the prices of imports and exports. When taking into consideration comparative advantage, the relative prices of goods that are made in rich countries are forced down by import competition and as a result, will decrease the wages of the least educated workers. Trade theorists believe the mere threat of foreign competition will drive down wages and prices. Labor economists argue that trade affects the labor market through the volume of trade. The import of goods made by low-skilled workers has the same effect as an increase in the number of low-skilled workers, a decrease in wages. Labor theorists argue that as the economy expands and people get richer, they spend less on clothes and more on expensive cars, so a textile worker's wages would be driven down, while a design engineer's would be pushed up (Two Tales of Trade, 1997).

There are two hypotheses, which explain the demand shift toward educated workers. The first states that technological change has been biased in favoring highly skilled, educated workers. The second states that growing international trade with low-wage countries has shifted labor market demand in the United States away from low educated workers (Sachs, 1996). Du Boff continues by writing that as

international trade wipes out manufacturing jobs, displaced workers are forced into the lower-paying service industries, such as custodians, taxi drivers, cooks, etc. This drives their wages down. These changes do not always affect just low-skilled workers. Other countries, such as India, the Philippines, and Ireland have an increasing number of skilled workers who work for a third to an eighth of their American counterparts, with better quality and productivity levels (1997). Comparative advantage theory states that some groups will benefit at the expense of others. Demand, for high-skilled labor and technical equipment, will increase, while demand for less skilled labor will fall. This will raise the wages of highly-skilled workers and lower the wages of low-skilled workers (Du Boff, 1997).

TECHNOLOGY, WAGES, AND EMPLOYMENT

The introduction of technology has been called the Third Industrial Revolution. Many economists blame technological advances for the wide wage gap. They argue that technological advances have increased the wages and productivity of the well educated, while leaving the less educated behind (Two Tales of Trade, 1997). According to Lee, since educated workers catch on faster to new technology, the technological revolution dooms the uneducated and untrained (1997). 1974 was a pivotal year, information technology took off and income inequality began to rise. Lower skilled workers saw wages fall before computerization really took off. Earnings had collapsed for low-wage workers by 1984, while computers started infiltrating workplaces between 1983 and 1984 (Lee, 1997). Poll data suggests that a large number of people relate technological change to the erosion of wages and inequalities (Cyert, 1987). *The Economist* argues that advances in technology have benefited the better educated at the expense of less educated workers (1998). According to Cyert, there is little evidence to prove that increasing wage inequality is due to technological changes (1987). Du Boff maintains that there is evidence to support technological changes causing wage inequality. He argues that technology creates a skill mismatch, which eliminated job opportunities for low-skilled workers (1997).

Technological change has two major effects: it transforms the processes by which inputs (including labor and materials) are converted into goods and services, and it enables the production of new goods and services. Process innovation is technological change that improves the efficiency with which inputs are transformed into outputs. Production innovation is the production of new goods and services. The stages of technological change are invention, innovation, and diffusion. An invention is the discovery of a scientific or technological advance and its translation into a working model. Innovation involves the process of advanced development, and diffusion is the period of adoption by users of an innovation. There are several factors that affect the diffusion of technology. First is the uncertainty surrounding

the characteristics of new technology and the payoffs from adopting it, and the actual profitability of its adoption. The obstacles blocking the diffusion of technology include costs, product standards, and the availability and evaluation of relevant information. Measuring technological change is difficult. Research and development investment or indices are used to measure the number of patents, publications, and tabulation of technology and productivity growth. The sources of this information include industrially funded research and development, federally funded research and development, and foreign research and development (Cyert, 1987).

Technology affects three areas in the United States economy: the structure and performance, aggregate unemployment, and labor demand. Private non-agricultural employment in manufacturing was 36 percent in 1966, 24 percent in 1985, and is still declining. Imports were 5.1 percent of GNP in 1966 and 11.4 percent in 1986. Exports were six percent of GNP in 1966 and 8.9 percent in 1986 (Cyert, 1987). Aggregate unemployment increased in the 1970s and 1980s, which is attributable to the recessions in 1974-75 and 1981-82, and the increase in the supply of labor due to baby boomers and women entering the workforce. Displaced workers become unemployed because of plant shutdowns, permanent layoffs, and technological change. The demand for labor is determined by the rate of growth of the entire economy. Lags in technological performance can contribute to an erosion in employment and wages (Cyert, 1987).

There are two types of skills affected by technological change. Basic, which includes literacy, problem solving, reasoning, and communication, are skills acquired by workers prior to entering the workforce, through education. Job related skills, which are required by an employer, are necessary to perform a specific skill learned on the job. Job related skills are most affected by technological change (Cyert 1987).

IMMIGRATION, WAGES, AND EMPLOYMENT

Along with freer trade and technological advances comes an increase in immigration. Immigration is more politically controversial than trade and technology, although the argument for free trade and open immigration go hand in hand. When something is imported, it drives wages down in its industry. When more immigrants enter the labor market, the labor supply increases and wages drop (Borias, 1997). He continues by writing that trade and immigration increase the effective labor supply of a particular group. For example, when a car is imported from Japan, not only is a car gained, but also 150 hours of manpower and 230 hours of engineering expertise (1997). Lee points out that immigration is swelling the supply of unskilled workers (1997). In addition, a disproportionate number of

immigrants are high school dropouts, which increases the number of unskilled workers and contributes to the decline of relative pay (1997).

Richard Freeman believes that immigration has had probably a larger effect on the market for low-skilled labor than trade. For those in the service industries, like barbers and taxi drivers, immigrants are competition (*The Economist*, 1998). Currently, the United States receives 800,000 legal immigrants and 300,000 illegal immigrants per year (Lee, 1997). The global hand, as compared to Adam Smith's invisible hand, has rearranged the world economy. Jeffrey Williamson describes the effects of the global hand as "capital and labor flowing across national boundaries in unprecedented quantity, resulting in a commodity trade boom" (Lee, 1997).

Beginning in the 1880s, France and Germany instituted trade protectionism and restriction on immigration. In the 1870s riots erupted between Chinese immigrant railroad workers and other immigrant workers because they were being paid $19.50 less per month than the Chinese immigrants. This resulted in the Chinese Exclusion Act of 1882. Between 1907 and 1924, the United States restricted immigration, as did the United Kingdom, Canada, and Australia (Lee, 1997). This downfall of the global hand may have been one of the economic causes for World War I. Germany built up its military, in par, because trade barriers deprived its industry of markets. The lack of immigration opportunities caused Germany to seek out the Ukraine and its colonies (Lee, 1997). After World War I, protectionist measures were implemented again with the Fordney-McCumber and Smoot-Hawley tariffs (Lee, 1997). Under the Smoot-Hawley Act, tariffs reached an average of 54 percent. As a result, exports fell 50 percent between 1928 and 1932 (Lusztig, 1996). Canada retaliated with a mega-tariff in 1930. The United Kingdom passed the Empire Preference in 1932. These measures may have tipped the scale to drop the world into the Great Depression and was a factor in World War II (Lee, 1997).

Immigration affects the labor supply more than trade. Immigration from 1980 to 1995 increased the high school dropout level by 21 percent (Borias, 1997). This raises the skill premium ratio, and is a permanent increase on the labor supply. Immigration may pose a greater long-term challenge to less-skilled labor. Unskilled American workers, in traded goods, can find refuge from competition in non-traded goods or the skill intensive export sectors (Collins, 1998).

GLOBALIZATION, OUTSOURCING, WAGES AND EMPLOYMENT

Globalization is also blamed for the increase in wage inequality. Globalization is defined as a change in goods, services, labor and/or capital available from the rest of the world. These shocks occur because of changes in trade policy, immigration, or in capital flow. The rising skill premium coincides with increased

trade with lower developed countries, immigration, and capital flow (Collins, 1998). Du Boff supports Collins' argument by stating that globalized production is a primary cause for the falling living standards of American workers (1997). Du Boff argues that globalization is less of threat to workers than corporate downsizing, deregulation, union busting, and technological changes. For example, because of deregulation, not competition from third world labor, high-paying jobs in the trucking and airline industry were converted into low-wage jobs (1997). Other factors, such as institutional changes like the declining power of unions or contract changes contribute to the increasing wage disparity (Collins, 1998).

Globalization includes trade, immigration, capital mobility, and transmission of technology across national lines. The trade component of globalization includes the ratio of imports and exports to Gross Domestic Product (GDP). The immigration component of globalization includes importing high-skill and low-skill workers. The employment aspect of globalization includes a shift of bargaining power from workers to employees. Although the diffusion of technology erodes the advantage of low skilled American workers have over lesser-developed countries' workers, there is little evidence that points to its effects (Collins, 1998).

Outsourcing is the import of intermediate inputs by domestic firms. It is a feature of globalization and includes the fragmentation of production into discrete activities, which are then allocated across countries (Feenstra, 1996). According to the empirical observations of Feenstra and Hanson, they measure outsourcing as the share of imported intermediate inputs, which are assumed to be low-skill intensive, in the total purchase of non-energy materials. They estimated imported intermediate inputs for a given industry as the value of input purchases from each supplier industry times the ratio of imports to total consumption (imports plus shipments) in supplier industry, summed over all supplier industries. There are two types of intermediate inputs: parts and components, and contract work done by others. When looking at the data observed by Feenstra and Hanson, certain industries, mainly those producing semi-durable goods, show a much higher propensity to outsource than others (Feenstra, 1996). Outsourcing involves the shift from domestic to foreign production of the input. The skill-intensity of production rises within sectors of the economy, as a result of outsourcing (Sachs, 1996).

Manufacturing industries are more susceptible to outsourcing. Feenstra lists two characteristics that make this industry amenable to outsourcing: (1) the production process can be separated into self-contained stages, and (2) production stages vary in the relative intensity with which they use labor or different skill types. This creates a rationale for moving non-skill-intensive activities abroad. For example, manufacturing a pair of shoes or a computer involves the production of many parts, which are later assembled into a final good. Product design and development require workers with at least a college education, the production of components require skilled technicians, while product assembly requires workers

with only rudimentary skills (1996). Outsourcing raises the relative demand and earning of high-skilled workers, contributing to a global increase in wage inequality (Hanson, 1998). Wood, Feenstra, and Hanson maintain that outsourcing accounts for 30 to 50 percent of the decrease in unskilled labor's share of wages from 1979 to 1990 (Du Boff, 1997).

THE STOLPER-SAMUELSON THEORY, THE HECKSCHER-OHLIN-SAMUELSON THEORY, AND FACTOR PRICE EQUALIZATION

The Heckscheer-Ohlin-Samuelson (HOS) model along with the Stolper-Samuelson (SS) theory is the most popular framework for analyzing the trade-wage linkage (Sachs, 1996). The SS theory states that a fall in the price of a good, as a result of a tariff, reduces the pay of the type of labor most heavily used in making it (*The Economist*, 1998). It links production prices with wages (Collins, 1998). It was developed in the 1940s and predicts that removing trade barriers would have different effects in different countries. If a country has a large unskilled labor force, its exports will tend to be intensive in skilled labor and skilled workers will gain from more trade. If unskilled labor is more abundant, its exports will be intensive in unskilled labor, so skilled workers will lose. Freer trade would raise the wages of skilled workers and lower wages of the unskilled in rich countries. Even in developing countries similar changes have occurred. In Mexico, the difference between a college-educated worker's pay and unskilled worker rose by one-third between 1987 and 1993 (Trade and Wages, 1996). The theory suggests that freer trade reduces inequality in poorer countries and increases it in richer ones. Poor countries, since they have mostly unskilled labor, should export goods that are intensive in unskilled labor, pushing up its wages. In reality, the poorer countries, who have liberalized trade, have more wage disparity (Trade and Wages, 1996).

What is wrong with the SS theory? There are other factors that drive wages. Growth, capital accumulation, and new technologies have a big effect on distribution of income. High inflation and deep recessions also influence wages. Trade raises the demand for skills. Freer trade will raise the premium paid to skilled workers; this is not predicted by the SS theory. Finally, the China effect; China has millions of unskilled workers and countries with higher-skilled workers compete with China (Trade and Wages, 1996).

The HOS model shows how production, employment, wages, and other variables are determined in an economy producing two goods using two factors of production. The relationship is as follows: a decrease in the price of a less-skill intensive product will be associated with a decrease in the wage of less-skilled labor relative to high-skilled, all else being equal (Collins, 1998). When one analyzes two regions, (the United States and a developing country), two factors of production

(low-skilled labor and high-skilled labor), and two goods (one, skill intensive and the other not), HOS theory predicts that, upon an opening of trade between the United States and a developing country, three events will occur:

1.	The United States will export the high-skill-intensive product and import the low-skill-intensive product;
2.	The relative price of the low-skill-intensive product will decline in the United States, the wage of low-skill labor will decline relative to the wage of high-skill labor in the United States, and employment will shift to high-skill-intensive output; and
3.	Firms in both sectors of the United States will raise the proportion of low-skilled to high-skilled workers, in response to the drop in low-skill worker's wages (Sachs, 1996).

As a part of the HOS model, factor price equalization (FPE) identifies conditions under which demand for labor is infinitely elastic. It implies that in an economy fully integrated in the world trading system, nothing domestic will affect wages. Relative wages are set by world factor endowment even if trade is only a small part or no part of the economy. The pay of all workers, even in non-import-competing activities, is determined in the global market. Only when the country specialized in the production of skill-intensive tradeables and produces no unskilled-intensive tradeable does the domestic labor market set wages for unskilled labor (Collins, 1998). This theory runs counter to what most economists believe. In the United States, wage differences among states persisted for decades despite free trade, migration, and capital flows. Around the world, wage differences between workers with similar skills have also persisted for decades (Collins, 1998).

PROGRAMS FOR DISLOCATED WORKERS

Though there are many winners benefiting from free trade, technological advances, immigration, and globalization, but there are also losers. It is difficult to identify the losers. Organized labor used to support trade liberalization. Economic pressures, fierce foreign competition, and the failure of Washington to develop sound economic policies for compensating victims of trade expansion and

facilitating their adjustment through educational training to move them into other jobs, drove organized labor against free trade (Collins, 1998). Some concerns are for the difficulties adjusting to structural change and displaced workers, and the decline in relative earning of low-skill workers. Policy responses can take place as assistance programs or educational training (Collins, 1998). Other policy responses include continuing to pursue trade opportunities and leaving the market to adjust for the disparity, continuing to pursue trade opportunities and pursuing comprehensive adjustment policies, maintaining current level of trade, but pursuing no more, and reverting back to protectionism (Coffins, 1998). Lee gives two possible solutions to wage disparity without slapping the global hand. The first is to subsidize unskilled workers as European countries have done in the past (with 19 percent unemployment), and the second is to allow higher wages for skilled workers to be maintained as to encourage unskilled workers to improve their skills (1997).

There are already policies in place to aid displaced workers. Job search assistance aids in retaining and career-development programs, including unemployment insurance (UI). Employment services (ES) maintains a public labor exchange and works closely with the UI system to monitor job search. Collins suggests instead of unemployment insurance, provide employment insurance, which would encourage displaced workers to become quickly re-employed, by providing earnings supplements for a fixed period of time (1998). State and local programs under the Job Training Partnership Act (JTPA) of 1981 include the Private Industry Council (PIC) programs, which provide assessment, testing, counseling, and referral to job search assistance and training services (Collins, 1998). Pell grants and Stafford loans provide need-based financial assistance for post-secondary education. The Worker Adjustment and Retaining Notification (WARN) Act requires firms with over 100 workers to give at least sixty days advanced notice of layoffs likely to last more than six months (Collins, 1998). Workers displaced by foreign trade can apply for Trade Adjustment Assistance (TAA), which was established by the Trade Expansion Act of 1962. This extends unemployment insurance payments for up to one year beyond the usual six month period, as long as recipients take part in a training program (*The Economist*, 1998). Training vouchers, as a part of TAA, pay as much as $10,000 for each of two years (Collins, 1998). Collins believes that programs like TAA can help foster support of an open trading system from those who are the most vocally opposed, such as unionized labor (1998).

Louis Jacobson stresses the importance of finding a job in the same sector as the displaced position to future earnings. Retraining will provide skills that help workers find new jobs in their former economic sectors, and help them maintain a larger portion of their previous income (Collins, 1998).

Government programs cannot alleviate all of the suffering that will exist because of wage inequality and structural unemployment. Cooperation between the public sector (schools preparing youth for the workplace) and the private sector (on

the job training opportunities) is vital to alleviate the growing wage gap between skilled and unskilled workers (Collins, 1998).

CONCLUSION

There are many forces that lower the wages of unskilled American workers. They include inadequate investment, labor-force changes, technological changes, international factor mobility, and globalization of the markets for goods and services (Collins, 1998). Increased trade is sometimes included on this list, but the majority of economists agree that free trade is superior to protectionism (Lusztig, 1996). Sachs maintains that there is not a direct link between trade and wage inequality. Some sectors lose from trade, but the economy benefits as a whole. Some workers may lose wages, but most consumers benefit from lower prices (Borias, 1997). Open trade has been shown to spur long term growth and encourages growth in developing countries (1996). The benefits of free trade are widely distributed, while the costs are concentrated. Those bearing the cost of free trade have a greater interest in the issue than those who reap the benefits. Protectionists have an easier time gathering public support than do those who support free trade. Protectionists can point to job loss, business failure, and other general economic problems. Those in support of free trade have to concentrate on more abstract issues such as comparative advantage, economies of scale, and long term growth. Protectionists may also have the support of other rent seekers; one group may support tariffs to benefit another in hope of getting protectionist measures for themselves (Lusztig, 1996). The broader measures of free trade include deregulation to allow foreign ownership of American airlines, shipping or television stations, or recognition of European drug testing regimes, or of foreign professional qualifications (*The Economist*, 1998).

Politicians and union leaders have put trade barriers up as a solution to wage inequality. In fact, import barriers would make Americans, as a whole, worse off. Instead of specialization, American companies would be forced to make goods as cheaply as they could and resources would be wasted on goods that could be bought abroad much cheaper. Everything, as a whole, would be more expensive, and all Americans would pay the price (*The Economist*, 1998). Du Boff writes that trade benefits all countries. In 1996, the Council of Economic Advisors reported that of 79 nationals, those with “open” economies (without restrictive trade rules) enjoyed a much faster rate of GDP growth over twenty years than did those with “closed” economies (1997).

Technological improvements, immigration, and globalization also benefit the economy, as a whole. Many economists believe that a gap in wages may serve an incentive to workers to obtain new skills (Lee, 1997). This challenge can be met by a larger investment in the future by the labor market, which will narrow the gap in the future (Sachs, 1996).

The question of why trade dependence holds down wages is not easily answered. Barriers may be the answer or high rates of investment in immobile assets (human capital and infrastructure). When countries attract physical knowledge assets, they will continue to have work forces that command high wages (Collins, 1998). A possible solution to the wage inequality problem is a combination of trade and capital flows that may eliminate economic separation of workers. Wages will be based on skill and effort, not geography; this would be a positive effect of globalization (Collins, 1998).

Finally, the most important instrument that can be used to alleviate the suffering of displaced workers is maintaining sound fiscal and monetary policies in the United States. This will allow the U.S. to remain competitive in the global marketplace, and raise the overall living standards of all employees, not just those who are highly educated and skilled, by maintaining full employment and low inflation. This can only be accomplished through minimal government regulation, allowing the free market to arrive at equilibrium.

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