THE WORLD ECONOMY BETWEEN THE WORLD WARS

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large countries only" (Hodson, 1938, 194). This disastrous meeting starkly exposed the total lack of any common ground between countries and hastened the further disintegration of the international monetary system. With global political relations also deteriorating rapidly, the decade witnessed an epidemic of competitive currency depreciation; extended resort to exchange controls; the rise of protectionism, bilateralism, import quotas, and other barriers to trade; and the development of hostile, noncooperating trade and currency blocs.

Finally, even when leaders acted responsibly and cooperation was tried, problems arose from the hold that old-fashioned political and financial ideologies exerted on policy-makers. The former is seen as responsible for the insistence on substantial reparations. This produced a new pattern of international settlements that made the smooth functioning of international payments dependent upon the capability and willingness of the United States to continue lending to Europe indefinitely. The destabilizing potential of this "arrangement" is self-evident. Still more important was the financial ideology reflected in the priority attached to the reintroduction of the gold standard, even where this could only be achieved by subjecting the economy to a severe program of deflation and obstructing future trade by the imposition of an overvalued currency.

Under the discipline that this doctrine enjoined—or the values it implied—country after country surrendered its "monetary sovereignty" and restricted its ability to accommodate balance-of-payments disturbances by any means other than retrenchment. The consequences of this situation became apparent in the early 1930s, when the constraints of the gold standard prevented countries from initiating policies to alleviate economic distress and even induced some countries to pursue policies that intensified the economic decline (Temin, 1989).

We shall return to these two propositions and discuss their validity and applicability at appropriate points in the subsequent narrative.

The Legacy of the First World War

2.1 The Economics of "Total War"

It is impossible to understand interwar economic history—and, more specifically, interwar international economic organization—without considering the long-lasting effects of a war that was first bitterly fought both on the battlefield and on what came to be known as the economic front, and that then continued, more subtly, in later postwar political and economic policies.

The First World War marked the true watershed between the nineteenth and twentieth centuries. This fact is particularly relevant when we consider our central theme of international economic organization. The late nineteenth century was characterized by a relatively well-functioning international payment system based on the gold standard. London played a pivotal and stabilizing role, and the leading central banks cooperated as necessary. In addition, there was almost perfect mobility of factors of production, reflected in large-scale movements of labor and capital from Europe to the New World. Commercial treaties mitigated the impact of tariffs on international commodity trade, stimulated by rapidly falling transportation costs. This was the nineteenth-century international economic order.

The war itself was a major economic revolution. In pre-1914 peacetime economies, the role of the state was extremely limited. Governments provided for defense, foreign policy, domestic security, and free universal elementary education in some cases; they subsidised railways and built national roads. Total revenue seldom exceeded 15 percent of GDP in the final years of peace; the same was true of total expenses (Lindert, 1994). This pattern was so firmly established in everybody's expectations that a "short-war theorem" had developed among governments and chiefs of staff. This theorem held that any 'modern' war was bound to be brief, given the limited resources available and the disruption in economic and social life that a war would create.

As it turned out, the short-war theorem was based on very shaky foundations. It disregarded both the flexibility of a modern economy and the adaptability of mankind to almost any situation. The revolutionary aspect of the war economy consisted mainly in the rapid shift of resources from consumption to arms production and the attendant reorganization of the entire economic life of the belligerent nations. In a relatively short period of time, thrifty nineteenth-century governments were turned into twentieth-century big spenders. In the United Kingdom, military expenditure rose from about 4 percent of GDP in 1913 to 38 percent in 1916–1917, bringing total government expenditure close to half of national income. In Germany, military spending alone rose to 53 percent of GDP by 1917 (see table 2.1, in which these

Table 2.1 Military expenditure as a percentage of net national product at factor cost, selected countries, 1913–1920 and 1937–1951

	UK	USA	USSR	Germany	Japan
First World	l War				
1913	4	1	_		_
1914	9	1		14	_
1915	34	1		41	
1916	38	1		35	
1917	38	6	_	53	
1918	32	13	_	32	
1919	13	9		_	
1920	4	3			_
Second Wo	orld War				
1937			9	_	13
1938	7	_		17	
1939	16	2	_	25	
1940	49	2	21	44	17
1941	55	12	_	56	25
1942	54	34	75	69	36
1943	57	44	76	76	47
1944	56	45	69	_	64
1945	47	38	_	-	
1946	19	10			_
1947	11	5		—	_
1948	8	5	18		_
1949	8	6	17		
1950	8	5	16		

Sources: UK, USA, USSR, Germany, 1938-1945: Harrison (1988), 184.

proportions are compared with those of World War II). A colossal amount of labor had to be swiftly diverted from peacetime production to military service and to rapidly expanding armament factories, chemical industries, shipyards, and the like. Female labor was widely used in the countryside. The capital needs for this colossal resource reallocation were met chiefly by borrowing or simply by printing large quantities of bank notes.

As soon as the illusion of a short war had vanished, all the contenders organized for a "total war." In Germany, Walther Rathenau, the brilliant head of the AEG electrical combine, was put in charge of an agency set up to exercise control over military supplies. In Italy, capable industrialists and top generals were given similar jobs. Germany's central planning of the supply of raw materials and their distribution to companies working for the government turned out to be particularly effective. It was accompanied by an industrial reorganization that more often than not entailed compulsory cartelization. Small industry was sacrificed to the needs of industrial giants.

In Britain, the Ministry of Munitions was created in 1915 under Lloyd George. The new ministry slowly acquired most of the features of Germany's War Raw Material Office, supervising private business and supplementing their efforts with direct investment when necessary. At the end of the war, Britain had some 200 government-owned plants.

In many areas, this colossal productive effort was coupled with an acceleration of technical progress both in products and production processes. Internal-combustion-engine vehicles, surface ships, submarines, airplanes, and several other products were drastically improved during the war, most of them subsequently enjoying peacetime development. At the same time, plants became larger and more efficient; the workforce—subject to military discipline—was "scientifically" organized.

With hindsight, one may say that perhaps the most revolutionary aspect of "total war" was general conscription. Society, particularly in the countryside, was deeply changed by the departure of almost all acceptable men and their replacement by women, children, and older workers. While serving in the trenches, men were exposed to mass propaganda of various kinds as never before, and some of them learned ways of organizing large numbers of people for political purposes. After the war, it was almost impossible for the ruling classes to ignore the reality of mass movements or to revert to the old, cozy ways of elite politics.

The extreme form of this political change came when the mass movements overwhelmed the government, leading to fundamental political changes. In Germany, the Kaiser abdicated and was replaced by a republic. The Austro-Hungarian Empire collapsed into a set of small countries. The Russian and Ottoman Empires collapsed in opposite ways. The Russian Empire was taken over by the Bolsheviks, who established a new Soviet empire with new economic policies to be described later. The Ottoman Empire also collapsed, but only Turkey and Egypt emerged as independent countries. The rest of the

UK: Feinstein (1972), tables 1, 3, 12, and 33, and supporting worksheets.

USA: U.S. Department of Commerce (1975), series F1, F6, Y458-59.

USSR: Bergson (1961), 128, 303.

Germany: Stolper, Hauser, and Borchardt (1967), 57; Sommariva and Tullio (1987), 226-27.

Japan: Milward (1977), 85; Ohkawa and Shinohara (1979), 269, 375.

empire became mandates of England and France and only later became independent political entities.

The British and the French empires, while enlarged by the acquisition of German possessions in Africa, were also weakened by the war as local movements for autonomy or even independence began to gather strength at a time when the home countries found it more difficult to mobilize resources for overseas expenditure. The Japanese Empire, on the other hand, emerged stronger from the war: Tokyo's almost costless alliance with the Entente allowed it to make some territorial gains and to consolidate its colonial holdings (particularly Taiwan and Korea) and its commercial influence in Asia.

A somewhat similar mechanism led to the demise of these various empires. In the advanced, industrialized countries, mobilization generated a large demand for food and led to agricultural prosperity. In the more agricultural regions of these empires, mobilization took workers—and often horses as well—from the countryside. The reduction of trade and of domestic production of consumer goods during the war meant that farmers had little to buy if they sold their output. The result was that the farmers felt hard-pressed and reluctant to sell food. This led to acute food scarcity in the cities and abundant food in the countryside with no market. Lack of food is a classic source of civil unrest, and the inevitable result was revolution. If the empires had been either industrial or sufficiently isolated from the conflict so that they did not mobilize, they could have survived. But being at the periphery of Europe and determined to participate in all things European spelled their downfall (Broadberry and Harrison, 2005).

In the international economy—the matter that interests us here—the war brought about two major developments. First, the displacement of the agricultural sector in the belligerent countries led to the lifting of import duties in order to gain access to the cheapest overseas supplies. The production of grains and meat in the fertile regions of the United States, Canada, Argentina, and Australia expanded to exploit those nations' comparative advantage in supplying European markets.

Second, financial cooperation was undertaken by the Entente powers in the form of inter-Allied loans. At first, Britain lent to its financially weaker allies, France, Italy and Belgium. Later on, the United States provided war loans to all the European countries fighting against the central empires. As a result of this cooperation, the allies' exchange rates could be pegged at politically acceptable levels, and hard currency was made available to buy overseas supplies, mostly in the home markets of the creditor countries themselves.

2.2 The Economic Consequences of the War

The most enduring legacy of the war was social and political instability, both domestic and international. It is not our aim here to discuss this issue. Suffice

it to say that, on the various domestic fronts, the war's ultimate results took the names of Mussolini in Italy and Hitler in Germany. And, of course, it was the war that opened the way to the October Revolution in Russia. More stable democracies, such as France and Britain, also suffered from immediate postwar instability, and for a brief time even they feared revolution.

In the international arena, the period between the Armistice of November 11, 1918, and the crisis of 1923–1924 that led to some kind of "stabilization" was one of great upheaval. The war left a permanent scar on international relations that made cooperation much more difficult for many years to come. In the Balkans and in parts of the former Russian Empire, active fighting remained endemic for a long time after the official end of the war, often dragging European powers into costly and useless interventions. Even more damaging in the long run was the way in which the peace treaties, particularly the one with Germany, were drawn. The unnecessarily punitive nature of reparations, the military occupation of the Rhineland, and eventually the direct intervention in the Ruhr all carried momentous consequences, some of which are related in the coming chapters.

Though we are convinced that unsettled domestic and international conditions played a major role in generating an unstable international economic environment, we confine our attention to those consequences of the First World War that directly affected the postwar organization and activity of the international economy. Some of these consequences were an immediate effect of the war; others followed from the way in which the great powers dealt with the issues that had still to be resolved when the armies finally called a halt to the slaughter and destruction. We look first at four direct effects of the war.

The Two Exogenous Shocks

As we have seen, the war caused a major disruption of the real economy, both on the demand side and on the supply side. In every belligerent country, there were swift changes of great magnitude in production and consumption patterns, such as those briefly outlined above. In particular, heroic efforts were made to increase productive capacity in war-related industries such as engineering, iron and steel, and shipbuilding.

The second exogenous shock occurred when much of this capacity became superfluous once the war was over. It proved exceptionally difficult to adjust to the required patterns of peacetime production as swiftly as required by sudden changes in demand created by unfulfilled wartime needs. This difficulty was to a certain extent the consequence of the devastation of transport networks and of fields, houses, factories, and mines during the fighting. The destruction was worst in France, Belgium, Italy, and Poland, but many other countries had also endured considerable loss of fixed assets. Much more important were the difficulties connected with the relocation of physical assets and labor to

peacetime production. For instance, huge investments were made in shipbuilding, a particularly asset-specific industry that found itself perennially saddled with excess capacity.

Another difficulty in returning to prewar patterns was created by the changes that had occurred in world markets. Competitors whose economic circumstances were affected relatively little by the war, notably the United States and Japan, had seized the opportunity created by the inability of European manufacturers to maintain their normal trading activity and had successfully invaded their markets. Japan, in particular, rapidly increased her sales to many Asian countries that had previously looked mainly to Britain for their imports. Moreover, as we have seen, huge export capacity had been built by cheap primary producers. The war also stimulated domestic production in non-European countries in order to substitute for imports from Europe. This is what happened, for example, to cotton textiles and other light manufactures in India and Latin America, thereby reducing the markets upon which the prewar output of the exporting nations had depended.

The end of empires in eastern Europe and the Middle East further disrupted international relations. Large markets were replaced by tariff barriers that restricted the flow of goods. Banks that previously had been able to draw funds and make loans widely were restricted to the new political boundaries by the attempts of new countries to establish and protect their own banks. And the new Soviet government found itself in a war to preserve itself and no revenues with which to do so. Hyperinflation—a tax on real balances—was tried and found wanting as real balances disappeared when inflation outran the rate of money creation. Requisition—communism from the barrel of a gun—was tried, but this method generated too much hostility and opposition. Finally, the Bolsheviks relented slightly in their communist zeal and instituted a New Economic Policy in which parts of the economy, notably agriculture, were allowed to function as if they were privately owned.

A More Rigid Economic Environment

Once the war was over, the greatest possible degree of flexibility in prices and practices would be required in order to adjust to these devastating domestic and external shocks, but in fact the prevailing trend was toward greater rigidity. A long-run tendency for the flexibility of price and wage structures to decrease is likely to be a feature of all advanced democratic economies that give high priority to the stability of incomes, prices, and employment, but the war considerably hastened this process. In the postwar labor market, wage flexibility was diminished as many more decisions were centrally negotiated in a greatly extended process of collective bargaining. Behind this change lay the growth of working-class militancy and the dramatic rise in the membership and strength of the trade union movement.

In the goods market, there was a similar tendency toward reduced flexibility of property incomes and prices. The war contributed to this tendency by causing an increase in government intervention in economic life, the formation or strengthening of trade associations and cartels, and the imposition of numerous controls. Each of these features survived in varying degrees into the postwar period.

More fundamentally, the war accelerated the trend toward larger business units. In the extremely difficult circumstances of the 1920s, many firms looked to collusion, cartels, and the exercise of monopoly powers to escape the consequences of increasing competition for shrinking markets. In Germany, cartels and other forms of industrial combination were already well established before the war, and the increase in their scope and strength during the 1920s enabled them to resist falling prices by restricting production. In Britain, a similar trend was strongly encouraged by the government, which deliberately promoted legislation and other measures to reduce competition in industries such as cotton, shipbuilding, and coal mining.

A Weaker Financial Structure

The financial sector was also greatly affected by the war and the extensive interference in the peacetime patterns of domestic and international markets that it stimulated. Most obviously, the war and its aftermath gave rise to unprecedented needs for revenue. It is estimated that the direct cost of the war in constant prewar prices was the equivalent of five times the worldwide national debt in 1914 (Woytinski and Woytinski, 1955, quoted in Aldcroft, 1977, 30).

In all countries, note issues and bank credits were expanded by immense amounts, with little or no attempt either to raise taxes or to borrow from the public on the scale needed to offset the additional demand on resources generated by the enormous military expenditures. The United Kingdom did more than any other nation to impose additional taxes, but even this was sufficient to cover only one-third of its expenditure (Morgan, 1952, 104). In France and Germany, the proportion financed in this way was very much lower, although the precise figure for the latter is complicated by the role of local taxes.

After the war, finance ministers faced the need to service these swollen internal public debts. Many of them were short-term debts and thus threatened monetary stability. There were also external demands for payment of war debts and reparations, while at the same time, international financial cooperation had entirely vanished. The reduction of budget deficits was made more difficult by the need to provide for reconstruction and by new demands for higher expenditure on social security and unemployment benefits advanced by active trade unions.

A large body of literature exists on some aspects of international financial dislocation, especially on reparations, inter-Allied debts (more generally on

Continental Europe becoming a net debtor), and the new pattern of international lending. Less is known about changes in the web of international banking that provided the grassroots connection for the international transfer of short- and long-term capital, as well as for the actual day-by-day functioning of an international payment system.

A Fragile International Monetary System

The classic gold standard was an early casualty of the conflict. Within a few months of the declaration of war, almost all European central banks, including those in countries that were to remain neutral, had unilaterally suspended gold payments. During the war, the powers of the Entente developed their own payment system backed by the inter-Allied loans, as noted above. This cooperation was designed to allow the belligerent countries to sustain the level of imports required to achieve the maximum military contribution to the common cause.

Once the war was over, cooperation ceased almost overnight. Inter-Allied financial assistance was suspended, and creditor countries immediately made clear that they expected reimbursement of their war loans. At the same time, the victorious powers insisted on extracting an unrealistic amount of reparations from those they had defeated. French retaliation for the terms that Germany had imposed on her after victory in 1870 was the dominant factor in preventing a more realistic settlement. A typical interwar British view of the overall financial outcome is given in the following scathing comment by Lionel Robbins (1934, 6): "The inordinate claims of the victors, the crass financial incapacity of the vanquished, the utter budgetary disorder which everywhere in the belligerent countries was the legacy of the policies pursued during the war, led to a further period of monetary chaos."

We turn next to the developments that followed from the end of the war, including the shock to the domestic economies of the former belligerents, the signing of the peace treaties that settled the relations between the former enemies, and the changes in the relations between the allies. All these factors had further profound consequences for the financial and economic developments of the 1920s and beyond.

2.3 The Economic Consequences of the Postwar Settlements

The Shock of Economic Restructuring and Social Unrest

During the war, as much as 30-40 percent of the belligerents' GDP was directly or indirectly controlled by the state. While supplies to the army came to be the direct responsibility of governments, the rest of the economy was to a great extent subject to various forms of state supervision. Thus, forms of

administrative controls on prices, wages, capital, and foreign-exchange markets were introduced more often than not. The return to peacetime economic organization and production entailed a huge process of resource reallocation that, contrary to what is assumed in economics textbooks, not only required a long period of time but also met with the resistance of the vested interests that had been created by the war.

Businessmen and industrialists were almost everywhere divided between those who favored an immediate return to a laissez faire economy and those—usually the suppliers to the army—who argued in favor of a slow "return to normality," with strong state help in the process. While most proponents of the latter view only wanted the state to provide forms of financial support to ailing industries and to guarantee the social peace, a militant minority in France, Germany, and Italy came to herald the birth of a "technocratic" and "corporatist" state that would actively support economic growth, particularly in the technologically more advanced sectors.

Whatever the pace was to be, industrial restructuring implied the closing of a number of plants (the case of shipyards is of particular relevance because of the magnitude of the supply cuts that were needed). Capital for the creation of factories that would meet consumers' demand was scarce at home and unlikely to come from foreign sources. The result was unemployment. At the same time, householders were frustrated by the fall in the real value of the wartime savings they wanted to use to satisfy their pent-up demand for consumer goods. In several countries, the combination of these two conditions produced a short but deep recession between 1920 and 1921.

Social unrest was, however, the main postwar problem. Its discussion would lead us away from the particular economic focus of the present text, but the economic implications of the political must not be underrated. The almost universal explosion of working-class struggles and protests after the war can be primarily attributed to two factors.

The first was the powerful growth of the organization, strength, and solidarity of the working class. Workers had already formed increasingly successful unions in the years before the war, not only in Britain, where they dated back several decades, but on the Continent as well. The war provided a tremendous boost to these organizations. Maintaining the discipline and morale of huge armies raised through compulsory conscription entailed both pressures and concessions, and the latter included promises of a better life for the masses as soon as hostilities were over. Life in the trenches also proved to be a tremendous catalyst for the emerging "mass society": workers from various areas and occupations got to know each other's needs and local strengths, and at the same time, socialist propaganda could be much more effective in such huge concentrations of working-class people.

In addition, at home, the urgent need to increase production of military supplies and overcome traditional restrictive practices required recognition of,

and concessions to, the trade unions. From 1916 onward, trade-union membership increased steeply in the United Kingdom, Germany, and France.

Second, the Russian revolution exercised considerable influence on working-class movements, even though this influence was ambiguous: a model for a militant minority, but at the same time a highly divisive factor for those who did not share this ideology.

The economic impact of social developments differed according to the relative weakness of the economies and of the governments that emerged from the war. Thus, in Germany, the social democratic government undertook a number of social reforms, certainly out of its own political conviction but also to undermine working-class support for the revolutionary movement. Mines and metal-making were "socialized," trade unions were fully recognized, and the eight-hour week was introduced. Deficit spending by the state followed, partly feeding into the price spiral. As a result, however, social unrest diminished considerably; by early 1920, hours lost in strikes were already half the number counted one year earlier.

Other defeated countries saw more dramatic developments that undoubtedly contributed to economic destabilization in central and eastern Europe. Thus, Bulgaria was swept by quasi-revolutionary winds, while in 1919 Hungary was actually briefly governed by the communists in the so-called "Councils' Republic."

In Italy—socially and economically the weakest amongst the large countries on the winning side—workers took over the management of a number of companies during the "red biennium" (1920–1921). The working-class movement was eventually weakened by the division resulting from the creation of a Communist Party in 1921, while reactionary forces gained sufficient strength to enable them to seize power violently by the March on Rome (1922) that inaugurated twenty years of fascist dictatorship. The latter event, however, was mostly the result of the failure of the old liberal politicians to provide viable solutions to postwar problems, particularly for social issues.

In France and Britain, the enormous number of strikes during 1919 affected both industrial output and investors' expectations. In both countries, governments regained control of the situation during 1920, often by the adoption of rather harsh repressive measures. However, while in France the tradeunion movement suffered a serious setback, in Britain the circumstances and the results of the social conflict were different, because the trade unions had already developed strong roots and because the victory of Lloyd George in the 1918 elections brought in a relatively sympathetic government.

The Economic Consequences of the Peace Treaties

The war finally ended, and after much wrangling, peace treaties were signed in 1919 with Germany (at Versailles), Austria (at St. Germaine-en-Laye), and

Bulgaria (at Neuilly), and in 1920 with Hungary (at Trianon) and Turkey (at Sévres). Various aspects of these treaties were to be a cause of severe disturbance to postwar trade and production. First, the way in which the political map of central and eastern Europe was redrawn disrupted long-standing economic relations and created new barriers to trade. Second, the attempt to hold Germany responsible for the war by imposing huge demands for reparations for the losses suffered by the victorious powers became a major cause of political antagonism and economic discord.

Pre-1914 trading patterns, communications, and financial relations had long been adjusted to the existing political boundaries. In the large central empires, these arrangements had evolved to coincide with customs and monetary unions. This well-established state of affairs was disrupted when the formation of new nation-states led to the creation of numerous smaller political units in the territories of the former Russian, German, Austro-Hungarian, and Ottoman empires.

The most extensive territorial changes came from the breaking up of the Habsburg Empire, leading to the loss of territory to Italy and the creation of six small nation-states (Czechoslovakia, Poland, Romania, Yugoslavia, and the much-diminished Austria and Hungary) in place of a single large multiethnic geopolitical entity. Germany lost all her overseas colonies and some of her best industrial and agricultural land, including Alsace-Lorraine and the Saar coal mines, to France; Upper Silesia and other territory to Poland; and smaller areas or towns to Denmark, Belgium, Lithuania, and Czechoslovakia. The Russian Empire also suffered major territorial losses, including four areas that became independent states (Finland, Estonia, Latvia, and Lithuania). Bulgaria was forced to cede territory to Greece, and there were substantial changes in the former Ottoman Empire, though the areas that Turkey lost were outside Europe. The final outcome was that there were 38 independent nations in Europe in 1919, 12 more than in 1914 (see figure 2.1).

In deciding on these changes to the map of central and eastern Europe, the victorious powers were primarily guided by the principle of national self-determination, not by economic considerations. This led to the creation of nation-states: political entities encompassing people of the same language, culture, and tradition. This principle was perhaps consistent with the political needs and ideology of the time, but it did not necessarily respond to economic needs. Foreign trade, in particular, was affected by the new frontiers, with significant consequences both for the development of the region and for the overall performance of the international economy.

Furthermore, this huge process of border adjustments and state formation inevitably failed to reconcile and satisfy all the conflicting interests and aspirations involved, leaving behind a permanent residue of social and national resentments. In the view of one historian, the territorial realignments may have created more problems than they removed (Thomson, 1966, 633). The



Figure 2.1. Europe before and after the First World War. Source: Martin Gilbert (1970), First World War Atlas (London: Weidenfeld and Nicolson). Reprinted by permission.

potential for further conflicts translated into the expectations of economic agents, particularly investors. In some cases, endemic fighting continued well into the 1920s, increasing the overall sense of instability.

Poland, Czechoslovakia, Yugoslavia, Latvia, Lithuania, Estonia, and Finland were each established as separate states. Romania was enlarged. Austria and Hungary were reduced in size and entirely separated from each other. Each new state created its own currency, erected trade barriers to protect domestic industry, and inaugurated independent fiscal and monetary policies. In particular, the imposition of tariffs (whether as a source of urgently needed revenue or as a means of protection), the loss of gold and exchange reserves, and the diminished possibilities for foreign borrowing by countries already overburdened by debts or claims for reparations all helped further to restrict the scope for foreign trade. Even from a narrowly defined economic point of view—that is, without taking into account the adverse impact of political uncertainty on the expectations of economic agents—these developments had a deep effect on the international economy by distorting trade and capital flows relative to the pre-1914 situation.

By the last decade of the nineteenth century, the Habsburg Empire had become a well-functioning customs union; it was also a rather efficient, if not optimal, currency area. Each region within the empire tended to specialize in those industrial and agricultural products for which it enjoyed a comparative advantage. Vienna, and to a lesser extent Budapest, had developed into well-functioning money and capital markets providing for the financial capital needs of the whole Dual Monarchy.

In the Danubian region, where industrialization had hardly begun by 1914, the establishment of independent policy-maker regimes implied the encouragement of industrial development. Thus Romania, Yugoslavia, and Bulgaria tended to favor high-cost native firms by erecting tall tariff walls around them at a considerable cost to the consumer and to the large agricultural sector. In Hungary, a more industrially advanced country, this policy was less extreme but had a negative impact on trade and growth nonetheless.

The case of Czechoslovakia was different in that the new state included the most highly industrialized parts of the former empire. Here the problem was that Czech industry was highly dependent on export markets that were severely affected by the new wave of protectionism. At the same time, the moderately protective agricultural policy of the Prague government had serious effects on the export outlets of other former members of the empire, given the high income of Czech consumers.

Although less industrialized than Czechoslovakia, Poland had a similar problem. While it was not heavily dependent on the Danubian markets for its agricultural exports, its natural outlets for industrial trade were disturbed by the new frontiers. In the previous four decades, the manufacturers of central Poland had developed "as part of the wider Russian market in which, in

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certain branches, they had taken the technical lead In the interwar years this market vanished, and Polish trade was virtually nil" (Radice, 1985, 34).

The international economy was also affected by the Bolshevik revolution and by the Russian civil war that continued until the early 1920s. In the last part of the nineteenth century, the Russian Empire had been increasingly integrated into European trade and capital flows. After signing a separate peace treaty with Germany, the Bolsheviks effectively severed most of the country's prewar links with the rest of the world. Trade was reduced to a fraction of its pre-1914 level, and western European capital was scared off by the repudiation of the tsarist regime's foreign debt. True, new countries—Finland, Latvia, Estonia, and Lithuania—emerged at the edge of the former empire, but these were economically too small to compensate for the loss of trade with Russia.

To sum up: the dismemberment of the Dual Monarchy, the splitting off of parts of the German and Russian empires, and the latter's autarkic evolution all represented a major shock to the international economy. These developments caused widespread resource misallocation, resulting in lower output and higher prices, particularly in central and eastern Europe. In the decades immediately preceding the war, this large area had made significant progress along the road of modern economic growth and was thus becoming ever more important to Europe's overall trade and production. In due time, of course, markets adjusted trade and capital flows to the new situation, but this structure was less conducive to economic efficiency than the one that prevailed before the war. Moreover, such adjustments were slow to come about, with the market process always taking far longer than economists are ready to admit.

In the aftermath of the war, the adjustment was made even slower by uncertainty regarding the stability of the new regimes, fear of revolution, the persistence of endemic conflicts, lack of information in western capitals about the new leaders, and the incompetence of some among the latter. For instance, it took long years of diplomatic effort and a number of international conferences to reestablish more appropriate levels of trade with the Soviet Union. And it was not until the mid-1920s that German exports resumed their prewar importance in the Reich's traditional central European markets.

The End of Financial Solidarity among the Allies

The abrupt end to the system of inter-Allied loans that had been put in place during the war delivered yet another shock to the international economy. The system had implied a flow of financial capital from the United Kingdom to the European members of the Entente, and from the United States to the Entente as well as to Britain. At the same time, part of this flow of capital was used to stabilize the belligerents' exchange rates, for both political and economic reasons. If the downward trend in the currencies were too steep, that might have been interpreted as the expression of a pessimistic market assessment of

the outcome of the war. If the fluctuations around the trend were too wide and erratic, this would have increased the cost of supplies in neutral markets.

Inevitably, however, the support for the European exchange rates served to weaken the dollar on the Japanese and neutral markets. While maintaining the domestic convertibility of the dollar, Washington had to impose an embargo on the export of gold. All this was politically acceptable as long as it could be presented to the American public as part of an overall set of measures—military, economic, and diplomatic—aimed at maximizing a coordinated effort that would produce swift victory. Once the latter was achieved in November 1918, few saw the necessity for—or even the possibility of—a continuation of the wartime financial policy.

The war had been tremendously demanding of Europe's resources, both human and economic. In various parts of the continent, particularly in the defeated countries, food emergencies developed that could be addressed only with considerable difficulty, given the lack of foreign exchange to pay for agricultural imports. In other areas, particularly in France, Belgium, and to a lesser extent Italy, reconstruction required considerable amounts of capital. Finance was needed all over Europe to carry on the reallocation of resources from war-related production to peacetime production. In these circumstances, the European countries, most notably Britain and France, argued in favor of a "soft landing." This would have meant a continuation of financial assistance from the United States and a slow relaxation of wartime controls on exchange rates and on the international economy more generally.

At the same time, however, France demanded the imposition of very harsh conditions on the defeated powers, particularly on Germany. These required the payment of huge reparations to fund not only France's reconstruction and war pensions, but also its foreign debt. Indeed, the French insisted that the reimbursement of their debts to the United States and Great Britain must be linked to the actual receipt of reparations from Germany. The two sets of requests were not mutually consistent. If the aim was international solidarity to rebuild the European economy, then everyone should have been required to pay a price for the success of the cooperative effort, especially those European countries that stood to benefit most from the continent's swift recovery. If, on the other hand, the aim was equitable justice—with everyone paying for the obligations incurred during the war—then there was no reason to establish a link between debts and reparations.

While individual European countries, particularly those on the Continent, proved to be short-sighted in their narrow focus on their own immediate interests, it was the attitude of the United States that had by far the largest impact on subsequent developments. The political weight of the United States was considerable, because it had to be reckoned that U.S. intervention in the war had been decisive in tipping the scale in favour of the Entente; and, most important, America was now the world's dominant financial power.

However, the United States did not respond adequately to its newly acquired responsibility as world leader. There were good political reasons—both domestic and international—for this attitude, but in retrospect it is evident that there was a cultural gap as well. The leaders of the United States lacked the necessary insight to understand where the long-term interests of the country actually lay. The Victory Loan Act passed by Congress in March 1919 authorized the government to open credit to foreign countries only for the purchase of goods directly or indirectly belonging to the government, and of grains the price of which was guaranteed by the United States. Europe was thereby provided with a safety net against a fall in food consumption below subsistence levels, but it was denied U.S. credit for reconstruction and for postwar industrial conversion to peacetime production. The pace of both shifts was thus slower, and the economic and political impacts of the postwar shock to the world economy more substantial, than they would otherwise have been.

THE WORLD ECONOMY BETWEEN THE WORLD WARS

One of the features—both cause and effect—of the postwar shock was immense turmoil in the world markets for foreign exchange. Before 1914, the most severe financial crises resulted in currency devaluations of only a few percentage points, even for those European countries that were forced out of gold. Nevertheless, they were considered a national disaster. With the end of U.S. wartime financial support of Europe and of the attendant pegging of Entente currencies to the dollar, exchange rates were left to their own fate. The United States resumed gold payments in 1919. In 1920, the pound had lost about 25 percent of its value relative to its prewar parity. The exchange rates of the other members of the Entente soon lost more than fifty percent of their 1914 value, and they continued to fall. As an average for 1920, the French franc stood at 36 percent of its prewar gold parity; the Italian lira stood at 25 percent. In the defeated countries of central Europe, colossal exchange-rate devaluations ended up feeding into hyperinflation. By 1920, the German mark was worth only 7 percent of its 1914 value, and in the following two years it disappeared as an international currency.

Of course, the blame for this situation cannot all be laid at the door of the United States. Wartime currency pegging was obviously untenable after the end of hostilities, and it was necessary for the exchange rate of each individual currency to adjust to changes in purchasing-power parity driven by their respective rates of inflation. Insofar as markets reacted to uncertainty, it must also be recognized that domestic circumstances were of paramount importance.

Nevertheless, errors of judgment and policy by international leaders were an important additional factor. The retreat from wartime financial solidarity was too abrupt. The lack of international credit for reconstruction and industrial restructuring magnified the markets' unfavorable expectations for the pace of recovery in France, Belgium, and Britain. Uncertainty about the amount of reparations and the settlement of inter-Allied debt was also a major source of volatility in international markets. Finally, the idea of re-creating an

international monetary system based on gold was not only highly ill-advised (as we shall see) but was also left to the initiative of central bankers rather than being part of a larger political design issuing from the world's leaders.

Reparations

In discussing the economic consequences of the war and the peace treaties, we have several times mentioned reparations without actually discussing them. In fact, they deserve specific treatment: they were by far the most controversial issue in the peace treaty with Germany and are widely regarded as one of the critical elements underlying the political and economic failures of the interwar period.

Article 231 of the Versailles Treaty held Germany responsible for the war, therefore establishing the legal ground for reparations. These were supposed to cover war-related material damages. To start with, the definition of "war-related material damages" was ambiguous. While the cost of reconstruction was undoubtedly included, a controversy soon developed over the inclusion of compensation for personal losses (mainly pensions to widows and disabled men).

Keynes was the first to condemn reparations as economically irrational and politically unwise. In a famous polemic (Keynes 1919), he argued that it was not sensible—indeed that it was ultimately against the best interests of the victorious powers—to cripple Germany economically, because much of Europe's pre-1914 welfare had depended on German economic growth. Moreover, Keynes envisaged difficulties in transferring real resources across borders, given the uncertainty about how the postwar international capital market would work. His overall view was thus that reparations were "vindictive," "insane," and ultimately "unworkable."

Many modern historians regard Keynes' castigation of European leaders on this issue as excessively harsh. Negotiators at Versailles were aware that "if the Weimar Republic was unduly hampered in employing its skilled population and material resources productively, the continent as a whole would not easily recover its prosperity" (Schuker, 1988, 14). However, they faced enormous budgetary problems themselves as a result of the war, and public opinion could not possibly be convinced to bear all the burden after the huge sacrifices made during the conflict itself. "La Boche payera" (Germans will pay) was a powerful political slogan in early postwar France. Whatever awareness European leaders had of the intricate web of problems created by the war, the fact remains that the reparation issue injected a considerable additional amount of uncertainty and acrimony into the volatile postwar economy.

An official of the British Foreign Office who later became a leading historian remarked in 1937 that "the important difference between the Versailles Treaty and the previous peace treaties providing for payment to the victors by the defeated Power was that, on this occasion, no sum was fixed by the

treaty itself" (Carr 1937). Soon after the Armistice, Germany was stripped of its gold reserves, most of its merchant navy, and whatever equipment (such as rolling stock) that might have been of use to the victors. Deliveries of coal were also required. In the following months, preliminary reparation payments were required, pending a final settlement.

In March 1921, the German failure to fulfill part of those preliminary requests prompted Allied troops to occupy the towns of Dusseldorf, Duisberg, and Ruhrhort on the east side of the river Rhine. Needless to say, this move did not contribute to a stable international environment. Only one month later, the London Schedule of Payments for the first time formally established Germany's reparation obligations. Germany, however, dragged its feet, so the Allies again entered its territory in 1923, this time occupying the mining district of the Ruhr.

It was not until 1924 that an agreement was reached that created the preconditions for a reasonably stable system of international payments, allowing private capital to flow into Germany. This agreement, the Dawes Loan, made it possible for reparations to be smoothly transferred to France (which was due to receive 52 percent of the payments made), the British Empire (which would receive 22 percent), Italy (10 percent), Belgium (8 percent), and the other minor Allies.

The mechanism by which the postwar international payment system was allowed to work will be the subject of further discussion in the next chapter. Here we wanted to stress the immediate adverse repercussions of the postwar settlement on the world economy. While the sum finally agreed upon, and the schedule of payments, might not have been significantly above what Germany could reasonably have paid without crippling its economy, the manner in which the whole problem was dealt with between 1918 and 1924 added an enormous further element of uncertainty to an already unstable postwar international economy. At the same time, the reparations issue made international relations difficult, acrimonious, and full of damaging potential for revenge.

The 1920s: Crises and Currency Stabilizations

We have now set the scene by placing the interwar performance of the international economy in its historical perspective and discussing in some detail the economic and political consequences of the First World War and the postwar settlements. To begin our study of the period itself, we look first at some of the critical financial developments in the 1920s. These include the problems of inflation and hyperinflation, which afflicted almost all the European economies, and the related instability of many of their banking systems. We then focus on the issue of exchange rates, and we analyze the different routes followed by the main countries in their attempts to stabilize their currencies and return to the gold standard. Our final theme in this chapter is the operation of the gold standard during this decade and the reasons that it failed to provide the benefits in international trade and growth its advocates had anticipated.

3.1 Accelerating Prices and Hyperinflation

During the war years, prices rose rapidly in all the belligerent countries as demands increased and supplies were disrupted. Neutral countries could not remain immune to this process. The extent to which prices surged upward between 1914 and 1918 is shown for a selection of countries in the first column of table 3.1. There was a brief respite immediately after the Armistice, when commodity prices fell, but from the spring of 1919, inflation resumed its course during a production boom that lasted until the spring or summer of 1920. The boom was especially strong in the United Kingdom and some of the neutral countries, and in the United States. As can be seen in the second column of table 3.1, the extent of inflation in 1920 varied widely, but price increases were common to all countries.

From the middle of 1920, the boom gave way to a worldwide slump that continued until 1921 or, in some cases, a year later. The depression was