

economic crisis

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DEFINITION

An economic crisis is a breakdown of established social relations, manifested in dry economic indicators of employment, growth, and inflation. This suggests a connection of economic and financial disruptions to internal processes specific to a given society at a given development stage.

Simple textbook explanation relates economic crisis to an economy's out-of-equilibrium position because of external (exogenous, i.e., irregular) shock, for example, natural disasters or wars, causing a mismatch between supply and demand for goods and services. A structural crisis may be due to uneven growth across sectors (e.g., countries relying on primary commodities as economic growth drivers), whereas sector crisis may affect one sector only. A more diversified economy is better prepared to withstand potential shocks to the system.

What matters is the unexpected nature of the initial shock. Once the system is out of balance, which should be rare, adjustments are predicted to kick in almost automatically. This usually happens through market clearing (or sorting) as, given the specifics, prices and quantities of certain goods adjust. The shock may be short-lived or persistent with ramifications for the economy in general. A theoretical expectation is that the system bounces back to either the initial position or a new equilibrium level, depending on proportions of adjustment. Consumers and producers begin to operate in a new plane at a different price–quantity equilibrium. In reality, circumstances do not always go as smoothly and a more exhaustive characterization is needed.

The above is extended by seeing economic crisis as being caused by either exogenous or endogenous (i.e., from within the economic system) shock leading to an abrupt breakup of established business practices, consumption patterns, and production lines. In most cases, there may not be immediate market clearing, as described earlier, and key features here are (a) severe output collapse, (b) stubbornly high and rising unemployment, and (c) rapidly

growing/falling prices (inflation/deflation). It is possible for a severe and prolonged economic disruption to lead to a state of economic collapse or depression (e.g., for Great Depression, see Bernanke, 2004 or for period of shock–therapy reforms in the former socialist economies, see Gevorkyan, 2011).

Above all, there is an adverse impact on living standards as an increasing number of people lose jobs, wages fall, poverty and income inequality rates rise, and businesses shut down or file bankruptcies. Because the disruption directly impacts the real economic sector, recovery to pre-crisis levels is often long (ranging between months and decades) and crisis responses vary. In economic history, the Great Depression and later the oil crisis of the 1970s in the United States are still the primary examples of such wide-scale collapse, long adjustment periods, and stagflation.

A more inclusive version, in part derived from the above, must account for financial transactions. Specific reference is to the role finance plays in the modern capitalist economy and financial innovation's impact on the real sector. A peculiar feature about this component is its endogenous nature, self-inflicting crisis that spills into the real sector.

All factors combined, a modern economic crisis then results in a perfect storm that leads to fundamental shifts in the economy's tenets. Examples of such perfect storms include the Great Depression, the recent debt crises in Latin America in the 1980s, in East Asia in 1997, and in Argentina 2001, and most recently the global recession originating in mortgage finance in 2007.

INHERENT DISRUPTION

There is much theoretical research on the nature of economic crises that is relevant to modern economic growth. One of the early commentators in a more systemic and historical way, Karl Marx (1867) suggested that economic crises were cyclical and intensifying in advanced capitalist society. While early (i.e., pre-capitalist) societies had experienced significant disruption to their economies, those were primarily due to problems of underproduction (the exogenous factors described earlier). Already as early as the

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eighteenth century, economic crisis assumed a more complex, endogenous nature.

A possible scenario would have a national market reaching a saturation point because of over-production in one or several sectors. Excess supply causes prices to decline, capitalists (the owners of the means of production) see their profit rates decline which in turn leads to a reduction in physical capital investments. A drop in physical capital demand has an almost immediate negative effect on productive capacities, as factories shut-down and laid-off workers reduce their consumer goods spending (e.g., a consumer sentiment index is one of the indicators in our economy today that helps tell part of the story). A significant bulk of already produced goods stays on shelves and inventory, dragging retail businesses in net loss positions.

Further, significant shares of productive capacity remain idle, eventually losing any competitive characteristics there may have been. From the real sector, the panic quickly spreads into financial markets, as stock market indexes drop and the banking system implements strict credit rationing. The latter delivers an additional blow to entrepreneurial activity constraining the operational space for any expansion or new product implementation.

In effect, the system starts to collapse, affecting every sector. This crisis of over-production may potentially be devastating if it goes unchecked leading to social disturbances. Marx's view was that contradictory tendencies (e.g., capitalists seeking higher profits by oversupplying the market to the point of their own financial ruin and social destruction) were cyclical and inherent to a capitalist economy. Hence accumulation of such episodes would lead to the eventual outgrowth of the capitalist system into another mode of production.

Joseph Schumpeter (1934) was among the few economists of the early twentieth century to fully grasp these features within the context of post-World War I global economic development. For him, the economic system is never stationary and is driven by a continuous process of innovation and the replacement of the old with the new. Conceptually, his "creative destruction" describes a way out of the crisis that the system finds on its own. Like Marx,

Schumpeter assumes a dynamic, constantly evolving, economic system, where finance plays an equally important role to the achievements of the real sector and often takes precedence.

For Schumpeter, economic crisis is part of the natural (inherent) succession of the overall economic system. There is a qualitative expansion (vs. quantitative defined by simple output growth) as innovative entrepreneurs introduce more efficient and improved product lines. Inefficient entities shut down. Decisions on financing and mobilization of productive capacity are coupled in one here leading to an operationally more robust capitalist system. The vital function of the system then is to facilitate financial credit to where it has higher profit potential. Schumpeter writes within the confines of real economy needs, where the financial side facilitates transactions sustaining the system and avoiding major social disruptions a la Marx.

KONDRATIEFF WAVES

Nikolai Kondratieff (1935) advanced an idea of probable existence of long wave cycles in capitalist economies lasting roughly between 48 and 60 years. As material wealth is accumulated, productive forces move to a newer, higher, level of development. The mechanism has been dubbed *Kondratieff waves*.

Kondratieff determined statistical regularity of ups and downs from his analysis of macroeconomic performance of the USA, England, France, and Germany between 1790 and 1920, with focus on wholesale price levels, the rate of interest, production and consumption of coal and pig iron, and production of lead for each economy. Within each cycle, there were intermediate waves along with long waves.

As a result Kondratieff stated that the economic process was a process of continuous development (e.g. Bernard *et al.*, 2014). Among possible explanations to the long wave cycles, Kondratieff mentions (a) changes in technology, (b) wars and revolutions, (c) appearance of new countries, and (d) fluctuations in the production of gold (Kondratieff, 1935). All four appear as valid external shocks in pushing any particular economy or the world economy in general into

Table 1 Kondratieff cycles.

		<i>Start</i>	<i>End</i>
First long wave	Rising phase	1780s–1890	1810–1817
	Declining phase	1810–1817	1844–1851
Second long wave	Rising phase	1844–1851	1870–1875
	Declining phase	1870–1875	1890–1896
Third long wave	Rising phase	1890–1896	1914–1920
	Declining phase	1914–1920	—

Source: Based on Kondratieff (1935).

a downward or upward cycle path. However, neither appears to be the sole determining factor leading to economic transformation. The remaining element is in the accumulation of preceding events: economic, social, or political, which prompt the intensification of the external factor.

Therefore, the cyclicity in the global economy's performance, though maybe superficially measured in units of time, must be an inherent part of the capitalist economy. There the long waves were not a result of a random act, but endogenous to the essence of the economy. The internal dynamics were driven by the process of capital's accumulation, concentration, dispersion, and changing relative values. Table 1 summarizes Kondratieff's original timeline on long wave cycles.

REAL BUSINESS CYCLES

The concept of an economy going through business cycles (vs. transformational economic crisis, per se as defined earlier) is quite popular among economists. Access to real time macroeconomic indicators helps develop a sophisticated timing mechanism of the recessionary and expansionary phases of the economy.

For example, the US National Bureau of Economic Research keeps track of the national economy across business cycles (<http://www.nber.org/cycles/>) by looking at quarterly performance.

A highly abstract explanation comes from the theory of a real business cycle that explains the peak and trough points of the economy. The theory stemmed from contributions to

macroeconomics research made primarily by Lucas and Prescott (1971) and Kydland and Prescott (1982).

The cause of a business cycle is a random shock to the economy. Aggregate domestic output that in a perfect market maximizes agents' utility responds to exogenous shocks to the economy. The shocks come from the productivity side, sudden changes in technology, supply side shock (e.g., oil price fluctuations), or other. The occurrences have direct impact on effectiveness of all production factors in the economy, which in turn affect agents' decisions on consumption and investment. Such exogenous activity affects the real economy.

An international business cycles study of aggregate co-movements by Backus, Kehoe, and Kydland (1992) finds that in cross country modeling, consumption patterns have stronger correlation than output levels. Further, investment and trade balances appear to be more volatile than in the case of a closed economy. The problem with most real business cycle models is that they assign no role for fiscal or monetary policy, nor financial transactions for that matter.

ECONOMIC, FINANCIAL, AND SOCIAL

It is clear today that no exposition of the economic crisis can be complete without direct link to the financial aspects of the modern economy. Historically successful procurement of finance has been critical for one's enterprise (e.g., Shakespeare's *Merchant of Venice* offers an adequate fictional insight into the economy of the 15th century). In the wake of

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the global crisis of the early twenty-first century, this relationship has grown only stronger, raising more questions about the economy's stability.

Charles Kindleberger (2000) offers an exhaustive chronology and analysis of crisis-like events (manias and panics) across history and across various countries. At various stages of financial development, there was some trigger event that led entire system to disruption. Kindleberger observes that while the details may differ, the pattern seemed similar: from the South Sea Bubble and the Mississippi Bubble of the early 1700s, to bank runs in the mid-1800s England, to the Great Depression of 1929 and modern currency crises in emerging markets. The end result was disruption of financial flows that was either, in the case of success, contained within the financial system (e.g., see Bagehot, 1873 on early Bank of England bail-out efforts and the need for a lender of last resort institution) or, owing to a complex set of factors, spilled over into the real sector devastating the economy by cutting of access to credit and breaking payment links (e.g., as in the first global recession of the twenty-first century).

Related is the influential analysis by Keynes (1936) who was one of the few at the time to offer an alternative sound explanation to economic crisis. He also argued that there may be periods when not all savings in the economy were recycled proportionately in productive investments via the banking system. The system, again, was dynamic and crisis prone, only this time it was due to speculative financial activity as owners of capital sought higher returns.

In Keynes's view then, sharp prolonged declines in economic activity can be reversed via proactive stimulus to effective demand. In many times this would require deficit financing, as the opportunity cost of not doing so far outweighs the potential gains of reigniting the economy. Hot on the tracks of the latest global crisis authorities in the advanced and emerging economies (mainly the G-20) re-enacted Keynesian proactive fiscal policies via now known stimulus packages and bail-outs of "too-big-to-fail" organizations (e.g. Gevorkyan, 2011) though the subject is highly contentious politically.

Working around the same time, Kalecki (1937) suggested that there was an inherent "principle of increasing risk" that guides investors' actions. Gradually the system becomes overleveraged (in modern terms) to the precipitation point at which any trigger might cause the collapse. The break-up is costly and potentially affects financial (and real economy) groups outside of the primary investors, as the latter rely on increased borrowing from the former to finance their activities.

Hyman Minsky (1982, 1986) extended the preceding analysis by establishing an unambiguous link between the financial and the real sectors in the economy. His three types of financing, "hedge," "speculative," and "Ponzi," are instrumental in explaining how exactly debt pileup may be pushing the economy to a crisis-like situation. This analysis applies equally rationally to private sector and sovereign debt. Complementing this is the discussion on lenders and borrowers risk that guides the evolution of the modern banking system.

The persistent transformation of the most conservative, yet most adaptive of the modern industries – banking – is critical in the final morphology of modern economic crises. The fact that the contemporary economy has developed global interdependencies (e.g. via commodity derivative trading or currency carry trade, Gevorkyan and Gevorkyan 2012) adds another dimension to modern economic crises. Similar to historical incidents (e.g., betting against the German currency of the time, the Mark, in the post-World War I period) but with greater intensity, now circumstances of speculative nature, aided by fast technology, against any particular currency may throw off a given country's fine economic balance. Emerging and developing economies are the most prone to this, where sharp outflow of foreign exchange leads to early loans callbacks by the banking system, disruption of productive processes, layoffs, unemployment, and rising social costs until long awaited macro stabilization (e.g., Russia and Eastern Europe in the 1990s, East Asia 1997, Argentina 2001, and now Greece and Spain 2010–2012). In effect, the economy at large becomes hostage to its financial sector component.

Historically responses to crises have varied between countries, epochs, and economic conditions. Several multilateral international institutions (e.g., World Bank, International Monetary Fund, and European Bank of Reconstruction and Development) have come into existence as a result of some of the most severe crisis outbreaks. In most destabilizing occurrences since the Great Depression of 1929, the state in the shape of either fiscal or (nominally independent) monetary authorities have played an increasingly greater role in managing the post-crisis economy. In the post-World War II period, toward the 1990s (Eastern Europe and former Soviet Union transformations, East Asian, and Latin American crises) and in the most recent episode (of global financial crisis of 2008), the blended mix of fiscal and monetary policy has become a necessary component of the latest economic transformation. The main focus of the fiscal policy is to nurture investment in new diverse economic sectors or provide support to existing super-sectors (e.g., energy-dependent nations in emerging markets and BRIC countries) via tax subsidies or other guarantees. At the same time, monetary policy has been aimed at simplifying and expanding access to short-term financing, banking sector regulation, and capital requirements reassessment.

Economic crisis is a complex social phenomenon. It unites within itself pure technical, business, financial, and also political and social factors at the same time. Perhaps this has been one of the hardest lessons contemporary economists are re-learning, in the wake of the great recession of the early 21st century, as they are trying to battle double-digit unemployment rates and declining productive capacities.

See also *asymmetric information; debt financing; economic development; economic theory in the twentieth and twenty-first century; emerging markets: an opportunity and a challenge; financial distress; financial institutions; gross domestic product; transition economy; uncertainty*

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