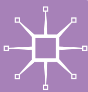

Lúcio Vinhas de Souza

A Century of Global Economic Crises

Monetary Policy in Search of An Anchor

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Harvard University, Cambridge, Massachusetts, Spring of 2024.

I dedicate this book to my past, namely to my beloved departed parents, Rômulo and Sônia, and to that moment when we will all be reunited, and to my future, namely to my beloved wife Olesya and my daughter Sonia, who are my life, for all we have built, and for all we will build on this earth.

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[1] António sadly passed away after fighting a cruel disease in 2013.

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CHAPTER 1

Introduction and definitions: thirty years in the ramparts

While writing this book, between the Fall of 2022 and the Winter of 2023/2024, I was struck by the sheer number (and scale) of crises that the global economy and the global monetary system had experienced just during my lifetime, which led me to wonder what was common (and connected) among those, and what was different (if anything). Hence the title I chose.

First things first: What is a crisis? Well, a crisis can be thought of as an extreme version of the downward part of the **normal economic cycle**. Of course, this in its turn begs the definition of what is an economic cycle, so here we go: all economies experience significant periodic changes in economic activity, from periods of expanding production, employment and consumption (a.k.a. the expansion part of the cycle) to other periods where the economy operates below capacity and unemployment is higher (the contraction or at least deceleration part of the cycle). This combination of expansions and contractions is called **the economic (or business) cycle**.

Business cycles occur because shocks, rigidities or disturbances—endogenous or exogenous, real or nominal, policy or technologically induced—to the economy push it off a stable and sustainable equilibrium path (e.g., making it grow above or below the "full employment" of its

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available endowment of resources). Their first formal analysis is to be found in the Burns and Mitchell seminal 1946 book, "Measuring Business Cycles".[1] This work was written while both authors were at the US National Bureau of Economic Research (NBER), and this private independent economic research body was later mandated to formally "date" US business cycles, a function it still performs today.

While "an unstable or crucial time or state of affairs in which a decisive change is impending" is the Merriam-Webster dictionary definition of a **crisis**, there is no real agreed or standard definition of what an **economic crisis** is. The used classifications of crises usually rely on a combination of quantitative and qualitative criteria, and normally differentiate between inflation, currency, debt and banking crises (see Table 1.1). However, economic crises are overwhelmingly multidimensional (e.g., one crisis type is related to, happens parallel or leads to another type—or types—of crises) and additionally, noneconomic crises (geopolitical, military) can lead to economic/financial crises (or, alternatively, economic/financial crises can lead to geopolitical/military crises: e.g., the "Great Depression" and its relationship with World War II).

We do, however, know crises are exceedingly common (as pointed out in the very first paragraph of this book, and also on its title). Using Reinhart and Rogoff (2009) data, 17% of their country sample was classified as in external **debt crisis** each year between 1970 and 2012 (or 11 countries per year experienced an external default or restructuring just during that period, see Fig. 1.1: on the other hand, this same figure shows us that this share during the "Classic Gold Standard"—see Chap. 2—was a mere 5%), while Laeven and Valencia (2018) estimates 151 **banking crises** between 1970 and 2017 (or over three banking crises per year).[2] However—and fortunately for all of us, of these many, many crises, just a few can be considered as **truly globally systemic** (so, affecting the majority of the global economy, in number of countries or GDP share).

[1] Burns, A. and Mitchell, W. (1946), "Measuring Business Cycles," National Bureau of Economic Research (NBER). (Arthur) Burns was then at Columbia University in New York City and the NBER in Cambridge, Massachusetts, but will later reappear in this book as the Chairman of the Federal Reserve from 1970 to 1978, during the so-called Great Inflation period.

[2] The numerically more precise Laeven and Valencia (2018) framework aims to reduce the use of subjective criteria in dating these events, compared with, for example, Reinhart and Rogoff (2009).

Table 1.1 Definitions of economic crisis types

Crisis Type	*Threshold*
Inflation	An annual inflation rate of 20% or higher.
Currency (Crash)	An annual depreciation versus the US dollar (or relevant anchor currency—historically the UK pound, the French franc, the German mark or the euro) of 15% or more.
Currency (Debasement)	
Type I	A reduction in the metallic content of coins in circulation of 5% or more.
Type II	A currency reform whereby a new currency replaces a depreciated earlier currency.
Debt Crisis	
External	A sovereign default is defined as the failure of a government to meet a principal or interest payment on the due date (or within the specified grace period). These episodes include instances in which rescheduled debt is ultimately extinguished in terms less favorable than the original obligation.
Domestic	The definition given above for an external debt crisis also applies. In addition, domestic debt crises have involved the freezing of bank deposits and/or forcible conversions of such deposits from dollars to local currency.
Banking Crises	
Type I—systemic (severe) *Type II—financial distress (milder)*	Banking crises are marked by two types of events (1) bank runs that lead to the closure, merging, or takeover of one or more financial institutions and (2) if there are no runs, the closure, merging, takeover, or large-scale government assistance of an important financial institution/group that marks the start of similar outcomes for other financial institutions.
Banking Crises (Laeven and Valencia, 2018)	(A) Significant signs of financial distress in the banking system (as indicated by significant bank runs, losses in the banking system, and/or bank liquidations). B) Significant banking policy intervention measures in response to significant losses in the banking system. Quantitatively, (A) happens if (1) a country's banking system exhibits significant losses resulting in a share of nonperforming loans above 20% of total loans or bank closures of at least 20% of banking system assets or (2) fiscal restructuring costs of the banking sector are sufficiently high, exceeding 5% of GDP, while for (B) at least three out of the following six measures are used: (1) deposit freezes and/or bank holidays; (2) significant bank nationalizations; (3) bank restructuring fiscal costs (at least 3% of GDP); (4) extensive liquidity support (at least 5% of deposits and liabilities to nonresidents); (5) significant guarantees put in place; and (6) significant asset purchases (at least 5% of GDP).

Sources: Reinhart and Rogoff (2009) and Laeven and Valencia (2018)

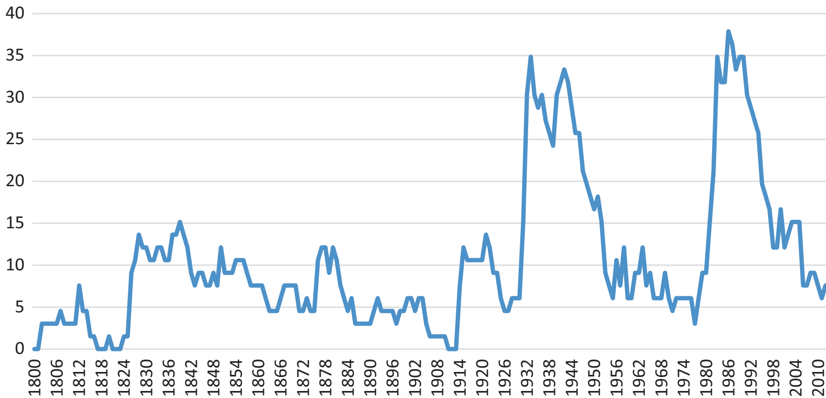

Fig. 1.1 Share of countries in debt crises (external default or restructuring). (Source: Author, based on Reinhart and Rogoff (2009) data for a sample of 66 developed and developing economies. (The countries are: Algeria, Angola, Argentina, Australia, Austria, Belgium, Bolivia, BrazilBrazil, Canada, Central African Republic, ChileChile, ChinaChina, Colombia, Costa Rica, Cote d'Ivoire, Denmark, Dominican Republic, Ecuador, Egypt, El Salvador, Finland, France, GermanyGermany, GreeceGreece, Guatemala, Honduras, Hungary, IndiaIndia, Indonesia, ItalyItaly, JapanJapan, Kenya, Korea, Malaysia, Mauritius, Mexico, Morocco, Myanmar, Netherlands, New ZealandNew Zealand, Nicaragua, Nigeria, Norway, Panama, Paraguay, Peru, Philippines, Poland, PortugalPortugal, Romania, RussiaRussia, Singapore, South Africa, SpainSpain, Sri Lanka, Sweden, Taiwan, Thailand, Tunisia, Turkey/Ottoman Empire, United KingdomUnited Kingdom (UK), United States, Uruguay, Venezuela, Zambia and Zimbabwe)

Inflation crises are also included on Table 1.1 (albeit the definition should also include *deflationary episodes*), which allows me to follow up by replying to another very basic question: **Why is price stability important?** Well, for several important reasons (and here I speak based on personal and family experience). First, price stability reduces distortions in economic decisions concerning savings and investment. Second, there are the so-called shoe-leather costs of holding money (e.g., when inflation is high, currency and non-interest-bearing checking accounts are constantly declining in value, so people will use scarce economic resources—time and "shoe leather"—to optimize the use of their monetary balances, misallocating those scarce resources and reducing productivity and growth). Third, price stability improves the transparency of the price mechanism and make economic agents (e.g., governments, firms, households,