MNB COLLECTION OF ESSAYS

ON THE ECONOMIC TRENDS OF THE 1970s

Magyar Nemzeti Bank, 2024

The global economy currently faces a myriad of challenges. The Covid-19 crisis that erupted at the end of 2019, mounting geopolitical tensions and deepening fault lines, the challenges posed by climate change, and a high inflation environment: all of these factors will leave a mark on the 2020s. In this global economic environment, it is worth using past experiences as a compass. Throughout history, there are many cycles, regularities and patterns that recur at certain intervals, which cannot be ignored when considering current or future developments. There are many similarities with the 1970s in terms of what is happening today, one need only recall the escalation of geopolitical conflicts, the resulting dramatic rise in energy prices and double-digit inflation. In this collection of studies, the authors try to draw conclusions based on past experiences to develop a strategy for successful adaptation and transition.

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Foreword

The global economy currently faces a myriad of challenges. The Covid-19 crisis that erupted at the end of 2019, the deepening trade conflict between the world's two most dominant economies, the United States and China, mounting geopolitical tensions and deepening fault lines, the challenges posed by climate change, and a high inflation environment: all of these factors will leave a mark on the 2020s. In addition, new megatrends are shaping the global economy, such as the rise of digitalisation and the green transition towards sustainable economic growth.

In light of these challenges, the 2020s are crucial to our future, which is why it is of the utmost importance for monetary policy and economic policy in a broader sense to steer the economy in the right direction. When our future is at stake, it is worth taking a step back and using past experiences as a compass. Throughout history, there are many cycles, regularities and patterns that recur at certain intervals, which cannot be ignored when considering current or future developments.

There are many similarities and parallels with both the 1940s and the 1970s in terms of what is happening today. From the 1970s, one need only recall the escalation of geopolitical conflicts, the resulting dramatic rise in energy prices and double-digit inflation. This collection of studies was written and compiled in the recognition that, as in the 1970s, the world's economies have arrived at a point when they are at the end of a successful developmental phase, but that this phase can no longer continue unchanged. At such epochal boundaries, it is obvious to draw on the experience of the past to develop successful adaptation and transition strategies.

The studies in this volume show that the responses to the oil price shocks of the 1970s were not uniformly optimal at the outset. This was due to the insistence on economic policies that had worked

in the past, but had proven ineffective in the meantime, and the mistaken perception that the shock itself was temporary. The different monetary policy and economic policy responses had a lasting impact on the subsequent development of each economy. As in the 1970s, the current decline in the terms of trade and the high inflation environment has taken countries by surprise. However, it is important that this time economic policy decisions be made armed with the experience of possible past mistakes and the proper lessons learned, because the trends that are established now will also have a lasting effect on our future.

György Matolcsy
Governor
Magyar Nemzeti Bank

I

Historical Background of Economic Developments in the 1970s

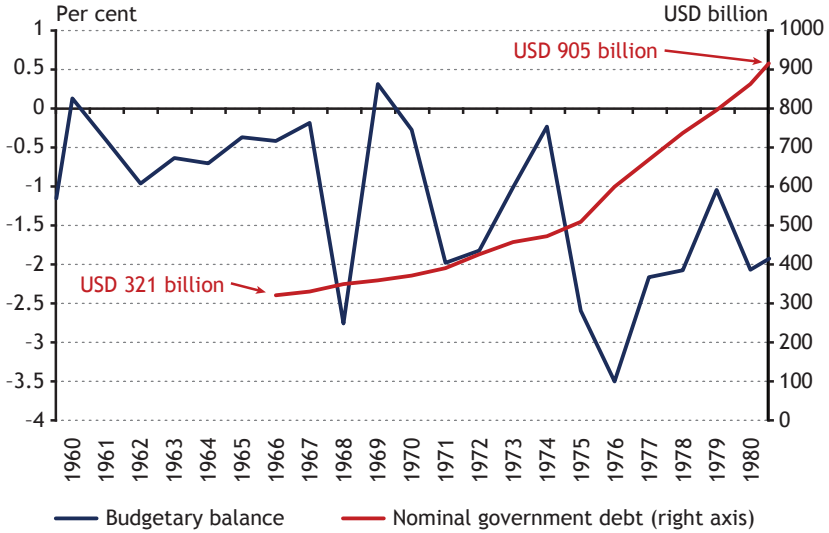
Dorina Kirtág

This study explores the historical background of the 1970s, along with the economic and political environment of the period. Data available until 5 November 2021 were used for this analysis.

In the 1970s, countries around the world faced a series of economic shocks and crises: the collapse of the Bretton Woods system, the 1973 oil crisis, the subsequent world economic recession and the second oil boom in 1979 represented the biggest challenges. As a result, a new era began in the world economy in the 1970s, in which international financial and global economic relations were also transformed (Kőrösi, 2014).

The 1970s marked the end of the general economic boom that followed World War II. The decade began with the disintegration of the global economic system established by the great powers at Bretton Woods in 1944 (Arrighi, 2010). The problems associated with the fixed exchange rate system were already apparent in the 1960s, due to the overvaluation of the US dollar (Nedelka, 2018), when the Johnson administration ran up higher budget deficits to finance the 'Great Society' programmes and the Vietnam War (Chart 1). By the late 1960s, the increasing deficit led to a rise in inflation in the United States (Bordo, 2017). At the same time, real wages began to stagnate, domestic purchasing power declined and increasingly expensive US exports faced disadvantages in the international market. The US current account balance became negative in 1971 for the first time since 1893 (Patterson, 1996). The new instability factors slowly escalated into a global problem.

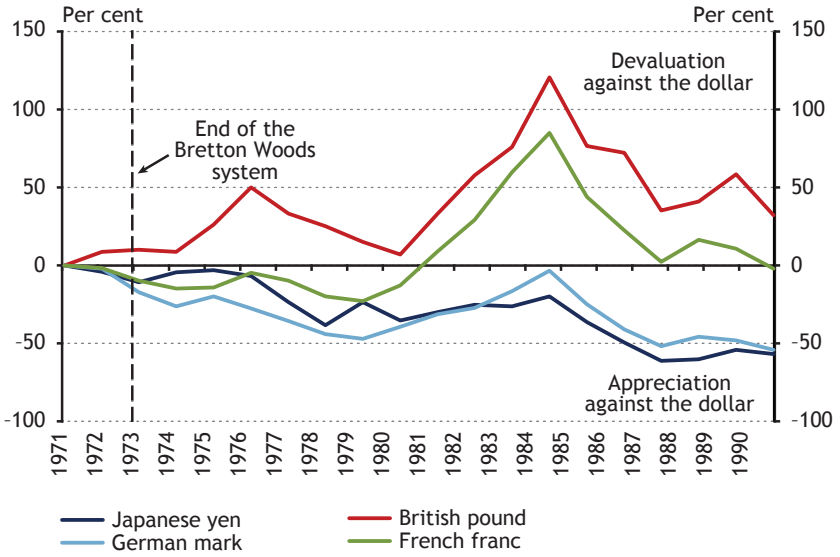
Chart 1: Budget deficit and government debt trends in the US



Source: Bureau of Economic Analysis, Office of Management and Budget

Rising inflation reduced confidence in the US dollar on the global currency markets, leading central banks in several countries with significant USD reserves to seek to convert their reserves into gold. The Fed could no longer guarantee this conversion, and in 1971 President Nixon announced the suspension of the dollar's convertibility into gold (Bordo, 2018; Kőrösi, 2014). This led to a depreciation of the dollar against several currencies and higher inflation (Chart 2). By 1973, it was clear that this was not merely a temporary suspension, but the permanent abolition of the gold standard (Nedelka, 2018). Following the collapse of the Bretton Woods system, the role of the dollar as a key currency appeared to weaken temporarily, with fixed exchange rates being replaced by floating exchange rates. The dollar was no longer pegged to gold. The rate of inflation accelerated, with imported inflation exerting strong pressures on both demand and supply sides, further exacerbating imbalances in national economies and the global economy (Kőrösi, 2014).

Chart 2: Exchange rate developments of the US dollar against major currencies



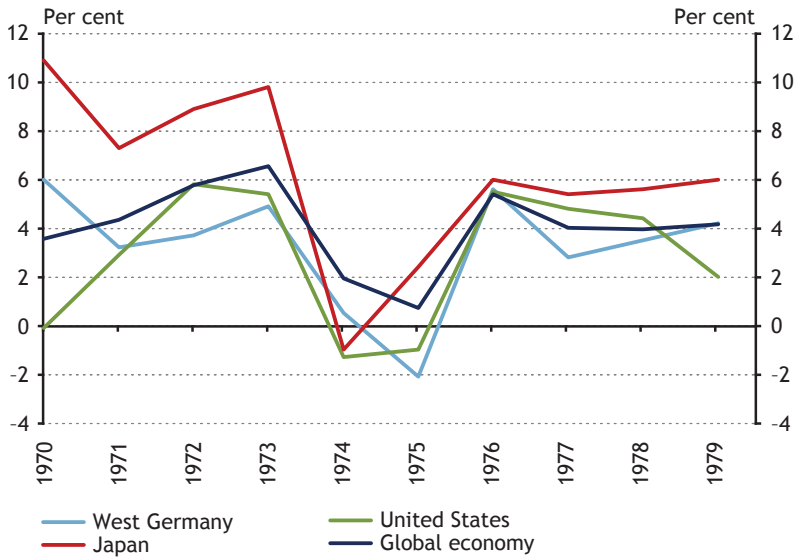
Source: Bloomberg

However, the dollar retained its international role after the Bretton Woods system. In 1974, the United States signed an agreement with Saudi Arabia, which meant that oil trade was still largely carried out in US dollars after 1971 as well. This marked the beginning of the era of petrodollars, which elevated the US dollar to a global reserve currency and contributed to the fact that much of world trade is still USD-based. The system generates a dollar surplus for oil-producing countries, which they invest partly in assets denominated in US dollars. This also means that petrodollars flow back to the United States, primarily through investments in government securities (Momani, 2008). The process creates liquidity in financial markets and keeps interest rates low, while OPEC countries can also avoid the risks of currency exposure by investing in safe US assets.

In October 1973, the first oil crisis was triggered by the outbreak of the fourth Arab-Israeli war. Members of the Organisation of the Petroleum Exporting Countries (OPEC) imposed an oil embargo on countries that supported Israel. The primary target of the measure was the United States. The embargo, which lasted for six months, led to a significant price increase and a global energy crisis, during which Western countries were confronted for the first time with the strategic importance of oil exposure. By the end of the embargo, the price of oil worldwide had risen by nearly 300 per cent, from USD 3 per barrel to nearly USD 12 per barrel (Rose, 2004), causing the affected countries to reassess their dependence on Middle Eastern oil. This led to far-reaching changes in energy policy. The crisis eased in March 1974, when the embargo was lifted following negotiations at the Washington oil summit. The oil crisis not only marked the end of the Bretton Woods system, but also the end of the golden age of economic growth (Nedelka, 2018).

The first oil crisis brought an end to an era of economic growth, high employment and moderate inflation that had been typical until then. Globally, the volume of international trade and the value of foreign direct investment also fell significantly. The period 1974-1975 marked the low point when the world's leading economies went into recession (Nedelka, 2018). US GDP growth fell from 5.4 per cent in 1973 to -1.3 per cent in 1974. In Japan, the decline was even more pronounced, with a 1 per cent recession following the 9.8 per cent expansion of the previous year (Chart 3). GDP growth in most Western European countries also fell compared to the previous year.

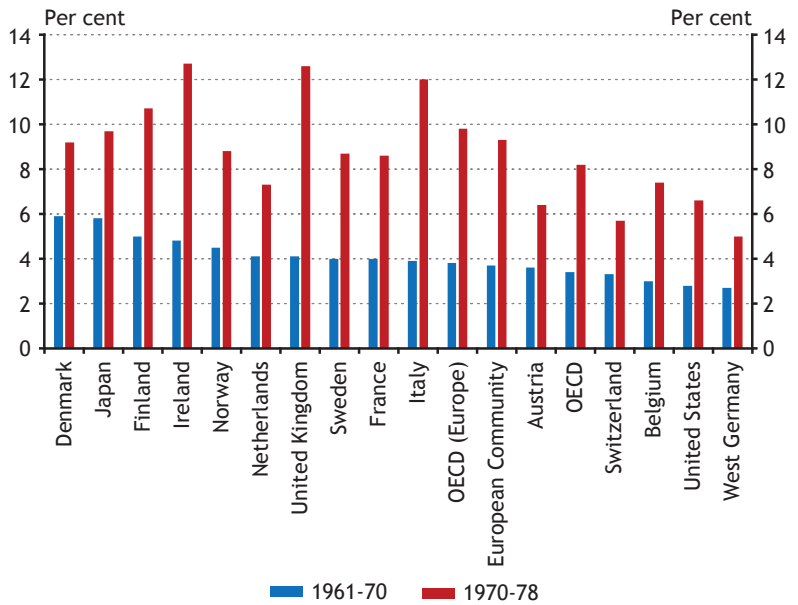
Chart 3: Annual real GDP growth in some developed countries and the world economy between 1970 and 1979



Source: Statista, World Bank

Inflation in many Western countries rose to double-digit levels, while unemployment also increased. Inflation peaked above 12 per cent in some OECD countries during the period from 1970 to 1978 (Chart 4). The combination of these negative economic factors led to stagflation. The sharp rise in oil prices, soaring inflation and ever-higher interest rates on loans negatively affected developing economies as well, as they had to borrow more to pay off their existing debts, often leading to spiralling debt.

Chart 4: Average annual growth in consumer prices in OECD countries in the 1960s and 1970s



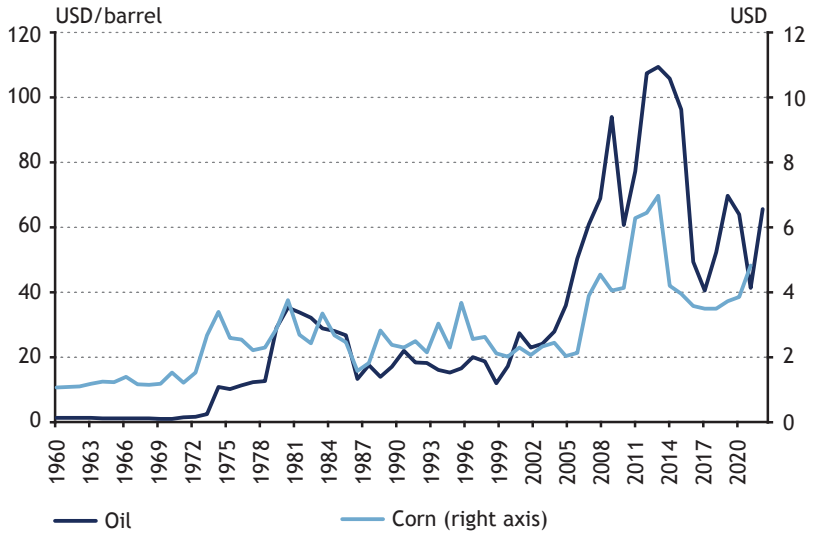
Source: Statista

While the world economy expanded by 6.5 per cent in 1973, the growth rate fell to 2.0 per cent in 1974 and to nearly 1 per cent in 1975. Global economic output began to recover in 1976, with GDP growing by 5.3 per cent, and then by around 4 per cent over the next three years (Chart 3). However, economic problems were not solved: inflation, unemployment and rising debt-to-GDP ratios continued to pose challenges for both developed and developing countries (Nedelka, 2018). Investors sought refuge mainly in gold and commodities amid higher macroeconomic volatility, soaring inflation and political uncertainty.

The world economy temporarily recovered from the crisis in 1976, but sharply rising oil prices again in 1979, as a result of the Iranian Revolution, led to another recession. The revolution

began in early 1978, overthrowing the regime of Mohammad Reza Shah Pahlavi. Subsequently, in April 1979, the Islamic Republic of Iran was proclaimed under the leadership of Ayatollah Ruhollah Khomeini (Ditté-Roell, 2006). The revolution caused Iran's oil production to fall by 4.8 million barrels per day (7 per cent of world production at the time) by January 1979 (Gross, 2019). The price of oil per barrel nearly tripled between 1978 and 1980 (Chart 5). In addition to the disruption in supply, panic in the markets also played a role. Prices of other raw materials also increased significantly during the period. The situation deteriorated again after the outbreak of the Iraq-Iran War (1980-88), which further increased instability in the whole region (Rose, 2004).

Chart 5: Trends in the average annual world oil price and corn price between 1960 and 2021



Source: Statista, Bloomberg

In response to high oil prices in the 1970s, industrialised countries took steps to reduce their dependence on OPEC oil. Electric utilities worldwide switched from oil to coal, natural gas or nuclear power. National governments initiated multibillion-dollar research programmes to develop alternatives to oil, and major non-OPEC oil fields were discovered in Siberia, Alaska, the North Sea and the Gulf of Mexico (Gross, 2019). As a consequence of these factors and the falling demand for oil, OPEC's market share dropped from 50 per cent in 1979 to 29 per cent in 1985 (Sadek, 1994).

II

Geopolitical Developments in the 1970s and the Birth of the New International Financial System

Péter Aradványi

This study summarises the key geopolitical developments in the 1970s and describe the changes in the international financial system. Data available until 17 November 2021 were used for this analysis.

Key Geopolitical Developments in the 1970s

The second phase of the Cold War, from 1957 to 1979, was characterised by fluctuations in the relations between the two superpowers, the US and the Soviet Union, and major shifts in the geopolitical structure. At the beginning of the period, the Cold War arms race intensified, the ideological divide between the opposing blocs deepened (construction of the Berlin Wall in 1961) and the Cuban missile crisis of 1962 brought the world to the brink of nuclear war. In addition to the two opposing superpowers, the European Economic Community and China, which were seeking an independent role, also entered the geopolitical arena. The traditional colonial empire was dismantled and Marxism and anti-imperialism took hold in large parts of the new African, Asian and Latin American states, while revolutionary and counter-revolutionary experiments also intensified.

The first half of the 1970s was characterised by an easing of tensions between the two superpowers, known as *'détente'*. In 1968, the Non-Proliferation Treaty was signed, and as a result of the strategic arms limitation negotiations that began in 1969, the

Strategic Arms Limitation Talks (SALT-1) was signed on 26 May 1972 by Richard Nixon and Leonid Brezhnev.

There was also a turnaround in US policy on the Vietnam War, in which the US intervened in 1963 to contain the Soviet Union. In 1969, President Nixon announced a military process called *Vietnamisation*. Its aim was to relieve the burden on US troops by strengthening the Army of the Republic of Vietnam and thus create the possibility of a military withdrawal from the country.

In 1973, a series of negotiations called the Conference on Security and Cooperation in Europe began in Helsinki and ended with the signing of the Helsinki Final Act on 1 August 1975. With 35 participants, the aim of the talks was to promote relations between the opposing countries of the East-West divided world. The same year saw the end of the US intervention in Vietnam.

In the second half of the 1960s, conflicts of power and ideological differences drove the Soviet Union and China apart. Recognising that the global balance of power, and thus the outcome of the Cold War, could be greatly influenced by the peremptory division of the disintegrating Communist Bloc, the United States opened up to China. First, Henry Kissinger the President's National Security Advisor, held secret talks with Chinese Premier Zhou Enlai in July 1971, followed by another official visit in October. In February 1972, Richard Nixon paid an official visit to China. During the week-long visit, President Nixon also met Mao Zedong. The process culminated in the restoration in 1979 of diplomatic relations between the two countries, which had been severed 25 years earlier.

Despite the initial successes of détente, by the end of the decade Cold War tensions between the US and the Soviet Union had escalated again. The period was marked by Soviet expansion in the Third World. After the oil shock, the Soviet Union extended its influence in geopolitically important countries situated along the

oil transport routes. Taking advantage of the paralysis caused by the US defeat in Vietnam, the Soviet Union invaded Afghanistan in 1979, which led to the failure to ratify the SALT-2 agreement and suspension of the détente process.

By the end of the 1970s, the geopolitical map had been significantly redrawn. Although neither power gave up its ambitions, the Vietnamese failure undermined the US's leading status in the Western world and the Soviet Union lost its ideological leadership position within the Communist Bloc. As a result of the Sino-Soviet split, the unified Eurasian continental power was receding, and China launched its own geostrategic imperial ambitions in Asia. International relations became more complex, and the first cracks appeared in the bipolar world.

The most significant events of the 1970s in terms of economic policy, with geopolitical implications, were the oil crises of 1973 and 1979. The 20-day fourth Arab-Israeli (Yom Kippur) war in October 1973 almost led to an open confrontation between the US and the Soviet Union. After the war, the OAPEC, led by Saudi Arabia and comprising the Arab member countries of OPEC, imposed an oil embargo on countries that had supported Israel in the war against Egypt and Syria (Canada, Japan, the Netherlands, the United Kingdom, the United States, and later Portugal, Zimbabwe and South Africa). As a result of the embargo, which lasted until March 1974, the price of crude oil per barrel quadrupled. The second oil shock in 1979 was caused by the Iranian (Islamic) Revolution and the drop in supply due to the Iraq-Iran war and the market reaction to it, as a result of which the price of crude oil more than doubled in the course of a year.

In terms of today's great power rivalry between the US and China and the re-emerging bipolar world order, the current decade bears a strong resemblance to the second phase of the Cold War.

Changes in the International Financial System

In the years following World War II, rebuilding economies created a huge demand for American products. The US (current) account balance surplus resulted in a global US dollar gap, which threatened to slow down/reduce international trade and thus economic growth.

By the mid-1960s, thanks to rising US imports, the increasingly costly Vietnam War and President Johnson's 'Great Society' programme, as well as rising inflation, the US's previous current account balance surplus had turned into a deficit and the global dollar deficit into a dollar glut. The stability of value and privileged position of the US dollar was called into question, undermining the foundations of the existing international financial system. By the end of the 1960s, maintaining the convertibility of the dollar into gold at a fixed rate (USD 35 per ounce) became increasingly difficult, and the gold coverage ratio had fallen to 22 per cent.

On 15 August 1971, Richard Nixon 'closed the gold window', i.e. indefinitely suspended the convertibility of the US dollar into gold. In the autumn of that year, the G10 countries held multilateral and bilateral negotiations to reform and rescue the Bretton Woods international financial system.

Under the Smithsonian Agreement, signed in December 1971, the dollar was devalued by 8.5 per cent (the price of gold rose to USD 38 per ounce). At the same time, the currencies of the advanced economies appreciated (Japanese yen +16.9 per cent; Deutsche Mark +13.6 per cent; French franc and pound sterling +8.6 per cent; Italian lira +7.5 per cent) and their currencies were floated in a 4.5-per cent band against the US dollar. The adjustment, however, did not live up to the expectations. The price

of gold moved further away from the official parity of USD 38 per ounce, and the currencies of advanced economies continued to strengthen against the US dollar, approaching the upper end of the exchange rate band, which forced central banks to intervene repeatedly.

In 1972, the six member countries of the European Economic Community (plus three potential candidates) set up an exchange rate mechanism called the currency snake (also known as the 'snake in the tunnel'). Under the new mechanism, the currencies of the member countries were floated against the dollar and also against each other, within a defined band of +/- 2.25 per cent. But the oil crises, the devaluation of the dollar and differences in economic policies interfered, and within two years most of the member states forming the currency snake had left the mechanism. As a result, by 1977 the currency snake mechanism had shrunk to a 'Deutsche Mark zone' consisting of Germany, the Benelux countries and Denmark.

On 12 February 1973, the US unilaterally devalued the US dollar by another 10 per cent against gold (USD 42 per ounce). Confidence in the dollar's value faded and within a short time all of the advanced economies (European Economic Community countries and Japan) stopped pegging their currencies to the dollar.

The Jamaica Accords, signed in 1976, formally abolished the Bretton Woods system by proposing amendments to the IMF's Articles of Agreement. The convention provided for flexible exchange rate regimes and abolished the role of gold as a reserve asset with retroactive effect. The Second Amendment, signed in 1978, legally recognised floating exchange rate regimes, demonetised gold and provided for IMF member countries to keep their exchange rates stable – but member countries were free to choose their own exchange rate regime.

In 1979, as part of the European Monetary System, the member countries of the European Economic Community set up the European Exchange Rate Mechanism, under which members floated their currencies within a band of +/- 2.25 per cent against the ECU (European Currency Unit). The exchange rate system was set up in preparation for the introduction of the euro, with the aim of reducing exchange rate fluctuations and thereby increasing financial stability.

III

The Rise of the Petrodollar System

Dorina Kirtág

This study outlines how the US dollar became the global commodity settlement currency after the 'Nixon shock'. The 1973 oil crisis had a major impact on the development of the world economy after World War II. Surging oil prices generated large trade and current account balance surpluses in oil-exporting countries, which, however, were not used efficiently, while oil-importing countries were forced to borrow. The 'recycling' of surplus foreign exchange was made possible by the creation of the petrodollar system, which also strengthened the dollar's international role and provided external demand for US government bonds. Data available until 9 November 2022 were used for this analysis.

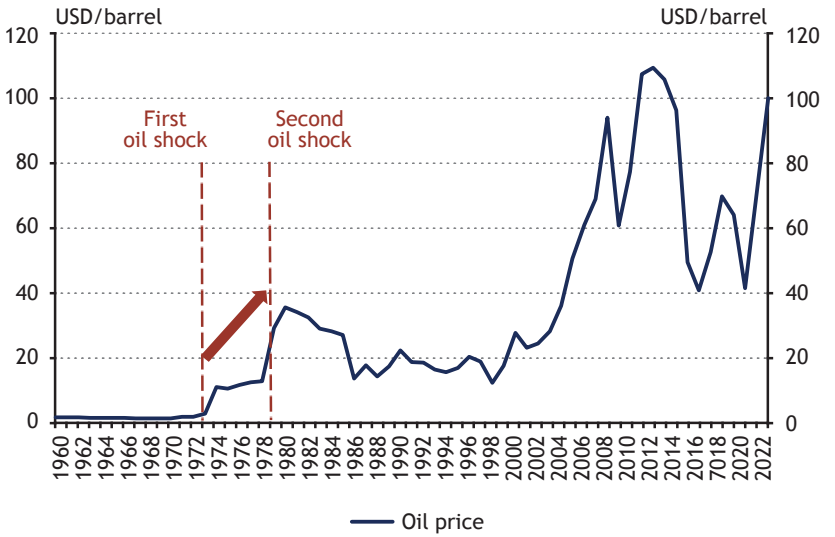
Introduction

Following the collapse of the Bretton Woods system, the US dollar's role as a global reserve currency appeared to weaken for a short time. The United States temporarily lost control of the global monetary system (Arrighi, 2010), and the dollar's situation was often equated with the decline of the pound sterling as an international currency. It was widely predicted that USD would become a less dominant unit of international transactions, and competition for reserve currency status was expected to intensify (Eichengreen, 2011, pp. 62-63). In the early 1970s, fears of a decline in the geopolitical and economic position of the United States intensified, exacerbated by the first oil crisis.

Impact of the Oil Price Shock and the Emergence of the 'Petrodollar Problem'

The first 'oil shock' began in the autumn of 1973 and led to a major imbalance in foreign trade. Over the decade, the world oil price rose steadily from USD 1.2 per barrel in 1970 to USD 35 per barrel in 1980, following the second oil crisis (Chart 1).

Chart 1: Average annual OPEC oil price per barrel between 1960 and 2022

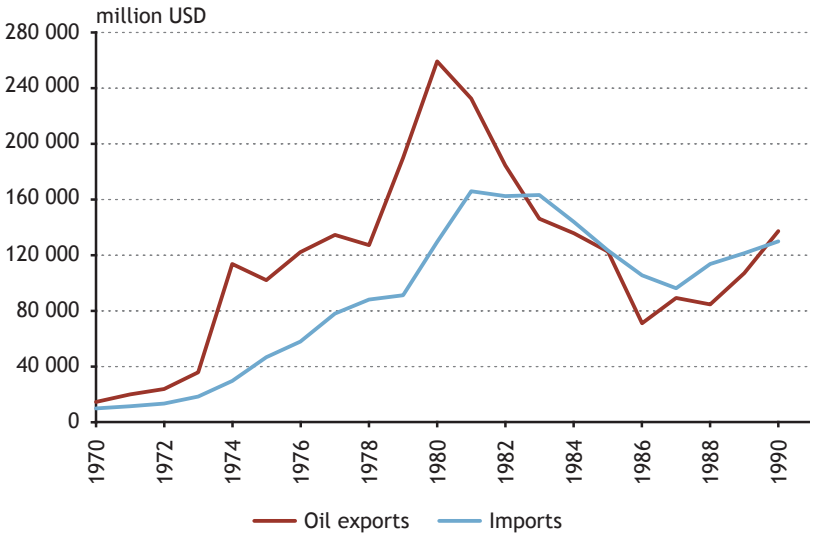


Source: Statista

The sharp rise in global oil prices was detrimental for oil importers and resulted in extraordinary gains for oil-exporting countries. This caused a major financial shock, because in the 1970s oil-exporting countries spent a smaller share of their increased revenues on imported products (Chart 2). Countries with significant oil exports but small populations – such as Saudi Arabia, the UAE and Kuwait – were unable to significantly

increase their imports (Basosi, 2020), leading to substantial trade and current account balance surpluses.

Chart 2: Trends in OPEC Member Countries' imports and exports of oil



Source: OPEC

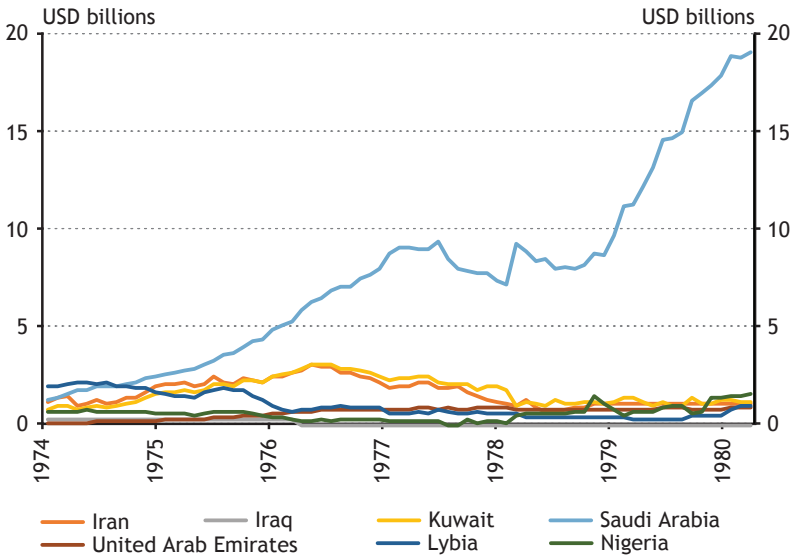
In 1974, the combined current account balance surplus of the main oil-exporting countries reached USD 68 billion (one third of GDP). By contrast, the deficit of industrialised countries rose to USD 31 billion (0.8 per cent of GDP) and the deficit of oil-importing developing countries increased to USD 34 billion (10.5 per cent of GDP) (IMF, 2006). Oil-exporting countries faced the challenge of how to utilise their large current account balance surpluses, while the banking system struggled to absorb the growing amount of short-term deposits from Arab states.

The 'Recycling' of Surplus Petrodollars

The solution to this problem was the process of 'petrodollar recycling', through which the surplus foreign exchange accumulated by oil exporters was recycled back into the global economy. Oil-exporting countries spend part of the petrodollars – the dollars accumulated by oil-producing countries as oil export revenues – on purchasing foreign goods and services and invest or hold the unspent petrodollars in foreign assets (Nsouli, 2006). The petrodollar system was established based on the 1974 agreement between the United States and Saudi Arabia, which stipulated that the world market price of oil would be fixed in US dollars. Other oil-exporting countries followed suit, and oil trade was then largely conducted in dollars (Momani, 2008), which allowed USD to maintain its international role. The 1974 agreement also included defence and arms purchase clauses. Total US arms sales to Saudi Arabia rose from USD 14.8 million to USD 296.3 million in the first half of the 1970s.

In 1974, oil-exporting countries deposited more than half of their petrodollars in bank deposits and money market instruments in developed economies. Significant amounts of petrodollars were invested directly in US government securities (Chart 3) and other short-term instruments. US government securities, however, accounted for less than one sixth of all liquid investments, with the remainder mostly placed with commercial banks. Around USD 25 billion was used for long-term investment, which included government lending and purchases of government bonds (IMF, 2006). This trend continued throughout the 1970s.

Chart 3: Trends in US government bond holdings in some oil-exporting countries



Source: US Department of Treasury

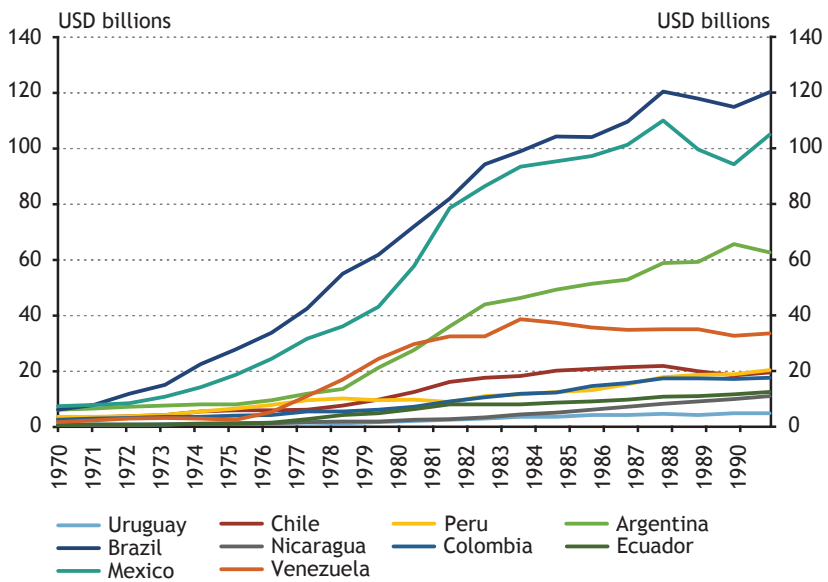
This process also contributed to a significant expansion of the euro bond market. The total value of international and foreign bond issues increased from USD 12 billion in 1974 to USD 38 billion in 1980. A significant part of the foreign exchange earnings of oil-exporting countries flowed into industrialised countries struggling with current account balance deficits as bond investments, including France, Italy and the UK.

Oil-exporting countries also used some of the petrodollars to provide foreign aid. Since 1973, the Arab oil-exporting countries have been among the world's largest donors, providing a total of approximately USD 44 billion in foreign aid between 1973 and 1980 (Oweiss, 1990).

A significant proportion of the recycled petrodollars flowed through the banking systems of developed countries to developing countries. Indeed, many of the developing countries

concerned faced difficulties in financing their increased current account balance deficits following the oil price rises. Most of the financing needs were met by loans from banks in developed countries. As a result, between 1973 and 1982, the net external foreign currency debt of non-OPEC developing countries rose from USD 4.5 billion to USD 145.9 billion, and these countries accumulated a current account balance deficit of nearly USD 336 billion (Lamfalussy, 2008). Latin American countries became the largest borrowing region (Chart 4), which later led to a debt crisis starting with Argentina following the tightening of monetary policy by the Fed in the 1980s. Mexico was the first country in the region to declare insolvency, and then the crisis spread to Brazil and other Latin American countries. The debt crisis had serious consequences for these countries, so the 1980s are considered a 'lost decade' for Latin America.

Chart 4: External debt developments in Latin American countries



Source: Montevideo-Oxford Latin American Economic History Data Base

Creating the 'Oil Facility'

Petrodollar recycling mitigated the short-term recessionary impact of the 1973 oil crisis. At the same time, oil-importing countries faced much higher oil prices than in the past and accumulated long-term debts. The International Monetary Fund estimated that the foreign debt of 100 oil-importing developing countries increased by 150 per cent between 1973 and 1977, exacerbated by the global shift to floating exchange rates (IMF, 2001). The IMF therefore introduced a new lending programme, the Oil Facility, between 1974 and 1976. This facility, financed by oil-exporting states and other creditors, was available to governments facing balance of trade or balance of payments problems due to rising oil prices.

Between 1974 and 1976, the IMF lent USD 2.4 billion to 45 developing countries under the Oil Facility. The aim of Johannes Witteveen, then Managing Director of the IMF, in creating this new instrument was to reduce economic tensions and thus preserve the open international system that was the legacy of Bretton Woods (James, 1996). Over time, international private banks took over much of the financing role.

The United States and the Petrodollar

There is a significant link between the petrodollar system and the assertion of US hegemonic power in the 1970s. The United States continued to benefit from the international role of USD, despite the fact that its convertibility to gold ceased after the Nixon shock. The link between the dollar and oil ensured that the dollar retained its important role in world monetary reserves and trade transactions. The dollar's share of total international reserves remained at around 80 per cent in 1977 (Eichengreen, 2011, p.

63). Due to the petrodollar system, the United States successfully strengthened the dollar's role in the global economy and ensured that it remained the most important means of payment in recent decades.

The successful resolution of the global balance of payments imbalances caused by the oil price shock was one of the greatest achievements of the post-World War II era. Nearly 500 billion petrodollars were recycled, flowing from oil-producing countries with capital surpluses to countries with trade deficits (Spiro, 1999). This helped to overcome the challenge to the international economic system and preserve its stability.

IV

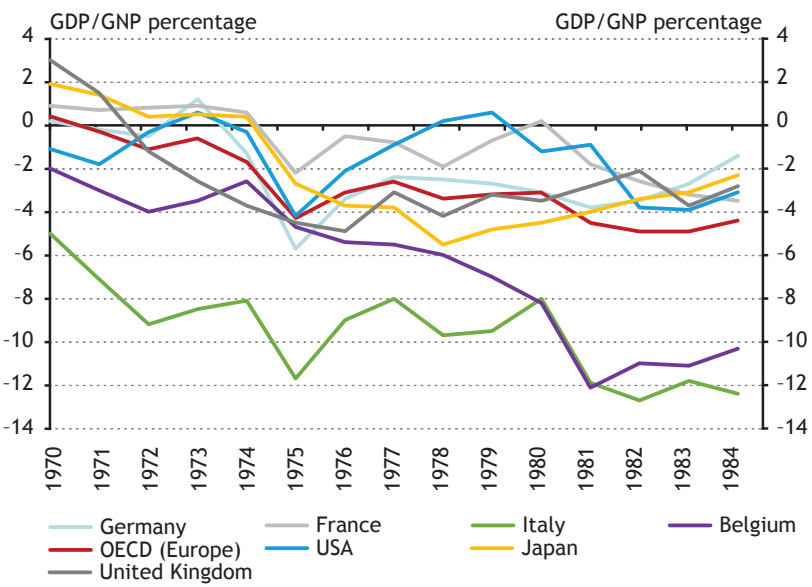
Debt Processes in the Developed Countries in the 1970s

Zoltán Szalai

This study summarises debt processes and the related circumstances in the 1970s. Data available until 2 December 2021 were used for this analysis.

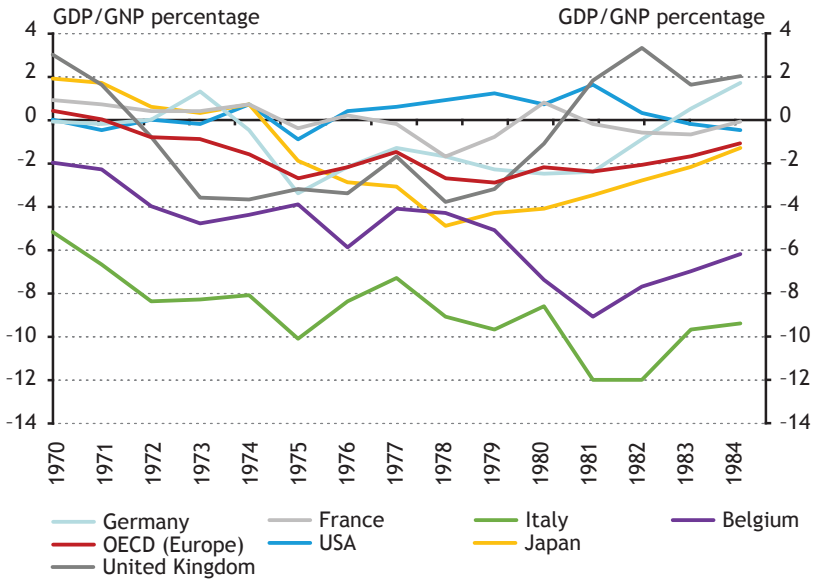
One new phenomenon during the 1970s was the recurrence of budget deficits, in contrast to the previously neutral or slightly positive budget balances. By the end of the decade, the average budget deficit had risen to 3.1 per cent in the OECD countries in Europe and to 4.5 per cent in Japan (Chart 1, Chart 2).

Chart 1: Trends in the general government budget balance in individual countries



Source: Price and Muller (1984)

Chart 2: Structural budget balance developments in individual countries



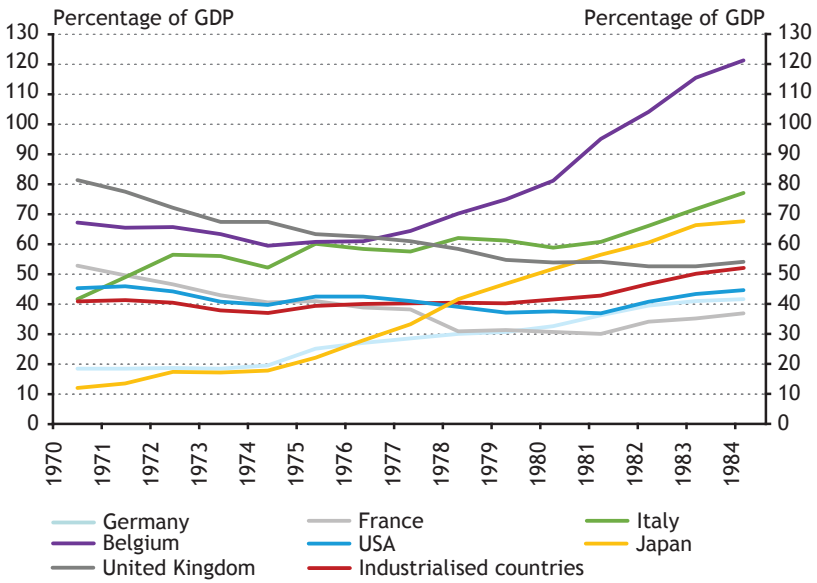
Source: Price and Muller (1984)

In the United States, the deficit also increased temporarily, but then declined again in the latter half of the period. There was considerable heterogeneity across European countries: for example, Italy and Belgium saw their deficits rise to more than 10 per cent by the early 1980s, while Germany and France maintained moderate deficits overall.

During this period, the gross public debt ratio increased significantly in countries with large deficits. However, because of negative real interest rates, this typically did not lead to significantly higher debt service, unlike in the 1980s when real interest rates were much higher. Gross public debt in the United States stagnated at around 45 per cent over the period, while in Japan it rose from 12 per cent to close to 70 per cent by the early 1980s (Chart 3). Across European countries, the German gross public debt ratio more than doubled from 18 per cent to over 40

per cent, the Italian ratio rose from 40 per cent to close to 80 per cent, while Belgium's jumped to over 100 per cent. We describe below the circumstances of these debt processes, broken down into the main chronological stages that determine their evolution.

Chart 3: Trends in gross public debt in individual countries



Source: Tanzi et al. (1994)

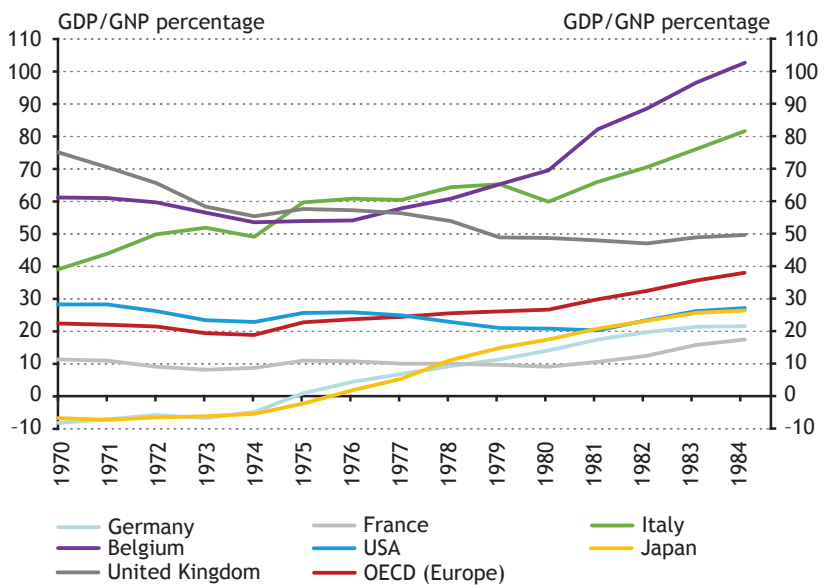
Developments before the First Oil Price Shock (1973):

After World War II, thanks to two and a half decades of rapid growth, state debt fell steadily to levels that were not a constraint on economic policy. Central banks were often formally, and sometimes only implicitly, expected to directly finance possible budget deficits. Reconstruction after the war, followed by the technological revolution of mass production and consumption, ensured rapid growth, which also provided debt-free financing for gradually increasing public spending. Labour incomes rose rapidly in line with productivity growth. At the same time,

employment was high, unemployment was low and demographic trends were favourable.

The rapid growth, free of social conflict, gradually slowed down in the late 1960s, leading to increasingly frequent social conflicts and strikes. Growth rates in OECD countries averaged around 5 per cent in the 1960s. In the following decade, growth became volatile, in many cases falling deep into negative territory, while averaging below 4 per cent. Productivity in the G-7 countries grew at an average annual rate of 3.8 per cent between 1963 and 1973, falling to 1.6 per cent in the period 1973-1981. Wages adjusted differently across countries and with a time lag to lower productivity growth and to the deterioration in the terms of trade due to the oil and commodity price shocks. As a result, inflation also increased from an average of 4.1 per cent in 1963-1973 to 9.6 per cent in 1973-1981. Most analyses attribute the slowdown in economic growth and productivity growth in the late 1960s to the fading potential of the mass production model, to the perceived limits of natural resources and to the specificities of the transition to a service economy.

Chart 4: Evolution of net public debt in individual countries



Source: Price and Muller (1984)

The 1970s saw a turnaround in the indebtedness of economies, including in European countries. Unlike in the past, indebtedness in the 1970s could not be linked to war, but occurred in conjunction with a high level of prosperity. It was not only a period of indebtedness, but also of a fundamental transformation of the economic role of the state in a broader sense. In the European OECD countries, for example, the share of public spending as a share of GDP rose from around 35 per cent in 1965 to 50 per cent in 1980.

The Period between 1973-1975:

The first oil price shock was considered temporary by most developed countries.

In addition to the two oil price shocks, several other factors played a role in countries' indebtedness. The rise in budget deficits over the decade was accompanied by a slowdown in economic growth. At the same time, the commodity price transition showed that a shift from the old, resource and energy-wasting economic structure to a new model was inevitable. The slowdown in productivity was substantially amplified by the commodity price explosion, further worsening growth prospects and leading to an increase in public debt ratios.

The economic slowdown was initially seen by most of the actors of the period as temporary. Governments typically continued to increase public spending on welfare, transfer and investment expenditure in line with rising social expectations, while workers also expected the usual wage increases. The profit ratio fell from 25 per cent typical in the 1950s to between 18 and 20 per cent after 1973 in the G-7 countries as a whole, leading to a slowdown in private investment and perpetuating sluggish growth.

The public debt of countries that later became highly indebted began to rise as deficits increased. This was the result of falling

revenues due to slowing economic growth, rising transfers due to higher unemployment, and rising public spending due to increasing public employment and business subsidies. The unemployment rate in the 1960s, which was typically below 3 per cent, rose to around 5 per cent in the OECD countries by the 1970s.

Developed countries responded mistakenly in terms of economic policy to the foreign trade impact of the oil/commodity price shocks. The deteriorating terms of trade worsened the trade balance. The deterioration in the trade balance during the first price shock was seen as temporary in developed countries and was addressed by stimulating further growth rather than through macroeconomic adjustment. In this process, external deficits were increasingly financed by US dollar loans, which enhanced external indebtedness and external vulnerability.

The transformation of the global financial system was also an important factor in the rise of countries' debt. The Bretton Woods financial system formally broke up in 1973, due to the devaluation of the US dollar because of its global illiquidity and currency speculation as the eurodollar market gained weight, which caused fixed exchange rates to spread, due to different expected inflation and policy rates in various countries. The eurodollar market grew from USD 10 billion to over USD 160 billion between 1965 and 1974, and swelled to USD 477 billion by the end of the decade. The dollar glut was caused by the US current account balance deficit, the expansion of the international activities of US banks, and from the second half of the decade the emergence of dollar (petrodollar) revenues of oil-producing countries. Since interest rates on dollar loans were low and the dollar was expected to weaken, and the states' creditworthiness was beyond doubt, it was convenient for indebted states to bridge what were seen as temporary difficulties with loans.

The Period between 1975-1979:

Following unsuccessful economic policy responses, adjustment begins and monetary policy comes to the fore.

Following the first oil price shock, most developed countries pursued a so-called 'stop-go' policy. This meant that recovery was supported by stimulating, accommodative policies, and then reversed and tightened when external or internal imbalances, sometimes on both sides, were encountered.

The degree of indebtedness of OECD countries varies widely. The literature attributes the differences to differences in the economies' international competitiveness (e.g. the competitive West Germany vs. Italy and the then underperforming Ireland), the energy and raw material needs of economies, the division of labour between fiscal and monetary policy, and the labour market and general political institutional arrangements and political party orientation. Countries with stronger international competitiveness were able to adjust more easily because they faced less terms of trade deterioration. Countries (regions) with a heavy industry overhang found themselves in a worse situation than other economies, not to mention countries that also had significant raw materials (UK offshore oil, Dutch natural gas).

Labour market institutions influenced the outcomes of intensifying distributional conflicts. A strong trade union presence and better wage bargaining positions helped to raise wages at the usual pace, but this worsened the profitability of companies and increased the vulnerability of the public sector to indebtedness. Examples include Italy, Belgium, Denmark, France and the Netherlands. Italy is another example where the subordination of the central bank to fiscal policy increased debt. Until 1981, before becoming independent, the central bank was obliged to buy treasury bills not subscribed by the markets. The

scala mobile mechanism included automatic compensation for wage inflation. At the same time, a high degree of organisation may have facilitated coordinated adaptation in, for example, in West Germany or Austria.

After the first oil and commodity price shock, a fundamental economic policy shift began, which was reflected in the response to the second oil and commodity price shock in 1979. The turnaround involved a gradual shift to monetarist, supply-side economic policies. The watershed event was the 1977 report by the McCracken Group of independent experts created for the OECD at the suggestion of US Secretary of State Henry Kissinger, followed by a similar shift in direction within the European Commission. The new approach considered the change in the terms of trade to be permanent (the impact of the 'Rome Report', i.e. the 'Limits to Growth' call, was already reflected in this) and proposed coordinated monetary and fiscal policy restraint to stop indebtedness. Within coordination between the economic policy branches, the much more active role of monetary policy in stabilisation was specifically mentioned, as opposed to the subordinate role it had previously played.

The Period after 1979:

Most developed countries then responded to the second oil price shock with fiscal and monetary tightening.

As a result of tightening macroeconomic policy, the profit margin rose back to near the level of 1972, before the first oil crisis. The divergence can be explained by the weaker cyclical economic situation caused by the second oil price shock and the resulting tightening policies. Fiscal tightening, however, did not reach a balanced or positive balance in 1980 and 1981 because of automatic stabilisers.

Falling inflation and austerity measures led to real interest rates that were unusually high in a recession. This explains why, although the average public debt ratio did not increase significantly during the 1970s, debt servicing soared in the 1980s. The indebtedness of countries with high public debt already required the maintenance of a positive primary budget balance, and economic growth falling below real interest rates (the 'avalanche effect') further increased debt ratios in Italy, Belgium and Ireland.

The 'Volcker shock', named after the newly appointed Fed chairman, further worsened the debt trajectory of indebted countries. The Fed initially maintained an accommodative monetary policy, but by 1978 inflation had risen to over 7 per cent. The central bank then changed direction and raised the policy rate to 10 per cent in August 1978. Despite this tightening, inflation rose to 9 per cent by the end of 1979. In August of that year, Paul Volcker was appointed head of the central bank, and his primary goal was to bring inflation down, even at the cost of a temporary rise in unemployment. As a result, in the early 1980s the FOMC raised the base rate from 9 per cent to 20 per cent. The debt trajectory of the indebted countries was worsened by the fact that higher US interest rates were passed on to the interest rate conditions of other countries. This was a problem because many states had borrowed at floating rates when the US dollar was cheap.

Annex: Key macroeconomic, fiscal and monetary policy developments in individual countries in the 1970s

Germany (West Germany): Already in the 1960s, the Bundesbank enjoyed a high degree of independence and government support to offset wage increases by raising interest rates. The Bundesbank also responded to the oil price shocks with further tightening, preventing second-round effects on wages. The Bundesbank was the first central bank to formally announce monetary aggregate

targeting in 1975. At the same time, it also kept an eye on external competitiveness and was willing to overshoot the target aggregate in response to the weakening US dollar, thus curbing the strength of the Deutsche Mark. Fiscal policy loosened somewhat in 1975, but this was quickly reversed and became restrictive by the 1980s. The gross public debt ratio rose from 18 per cent to 33 per cent during the decade.

France: The French authorities responded to the first oil price shock with stop-go policies, which forced them to exit the currency snake twice and devalue their currency. They then sought to achieve price stability by pegging the franc to the Deutsche Mark. They responded to the accelerating inflation and wage growth in the wake of the first oil price shock with a balanced budget, currency pegging and a neutral monetary policy, and joined the European Monetary System (EMS). The French debt ratio fell from 53 per cent to 31 per cent in the 1970s.

United Kingdom: The first oil price shock led to stagflation, with increased budget deficits. In 1976, the country turned to the IMF, followed by the implementation of a stabilisation programme in which fiscal policy was subordinated to monetary policy, breaking with the stop-go policy that had been the hallmark of the past. After the stabilisation, unemployment remained high for years and full employment was no longer a goal for the Conservative government taking office. Reducing the deficit and bringing it in line with the announced growth rate of the monetary aggregate became an important objective. Although the central bank exceeded the announced monetary aggregate, the high levels of interest rates and unemployment suggest that monetary policy remained tight nonetheless. The public debt ratio fell from 82 per cent to 54 per cent during the decade.

Italy: Macroeconomic policy was the loosest for the longest period in Italy. Trade unions were strong, including their representation in parliament. The central bank was obliged to buy treasury bills not subscribed by the markets, i.e. to finance the deficit directly,

which was only abolished under the IMF programme. Economic policy was export-oriented, also supported by the central bank during the period. The increase in the budget deficit, which was a feature of the period, helped to dampen wage bargaining conflicts. In 1981, after the IMF was called in, the independent central bank started tightening and the lira entered the European Monetary System. Inflation, which exceeded 20 per cent, began to decline. The stabilisation was made more difficult by the Italian wage bargaining system, under which wages are adjusted quarterly to actual inflation (scala mobile). Debt levels remained high and continued to rise for the rest of the decade. By the end of the decade, the public debt ratio had risen to 60 per cent, and then continued to rise in the 1980s.

Belgium: After economic growth of 4 per cent in 1974, GDP fell by 2.5 per cent in 1975. Industrial production contracted by 9 per cent in 1975. At the same time, inflation exceeded 12 per cent between 1974 and 1976, and unemployment also rose. The wage bargaining partners agreed to temporarily suspend the application of inflation adjustment, in order to improve corporate profitability. Belgium had a significant heavy industry and mining sector, but these became insolvent. The government hired former crisis sector workers who became unemployed and provided state aid to the companies concerned. These are some of the reasons for Belgium's indebtedness, which continues to be among the highest in the euro area. By 1980, the budget deficit had reached double digits, and the debt ratio had risen to 81.6 per cent. However, the public debt was fully financed by the savings of the population.

The Netherlands: In response to the oil price shocks, households increased their savings substantially, business investments fell and government investment was slowed down by the government, resulting in a current account balance that turned positive as early as 1974 and remained positive in 1975. The government stimulus of 2.5 per cent of GDP also only partly offset the fall in private demand. Savings led to lower interest rates on loans. Energy

prices helped the budget by the increase of the price of exported natural gas. The public debt ratio fell from 50.6 per cent to 45 per cent over the decade.

Ireland: Economic growth came to a virtual standstill in 1974, and in 1975 GNP fell by 3.8 per cent and industrial production by 5.5 per cent. The deficit and public debt increased in parallel, with the latter rising to 72 per cent of GDP by 1980. The Irish government responded to the economic downturn by increasing public spending, which rose to 61 per cent of GNP in 1981, but this was not followed by a similar increase in taxes. Workers did not accept the government's offer of wage moderation, and both wage increases and economic growth continued following the slowdown. As a result, Ireland ran massive current account balance deficits (-8.7, -5.5, -6.0 per cent of GNP between 1979 and 1981). By the early 1980s, economic growth had slowed to 1.5-2.5 per cent, and the budget deficit exceeded 16 per cent in 1980.

The USA: The Fed's response to the first oil price shock was determined by the prevailing view in professional circles at the time that the inflationary pressures that emerged in the early 1970s due to the financing of the Vietnam War and then intensified due to the rise in the prices of oil and other raw materials originated from the supply side, and therefore monetary policy was powerless to deal with them and that monetary tightening would seriously damage the economy. The central bank maintained an accommodative monetary policy until 1978, by which time inflation had risen above 7 per cent. The Fed then changed course and raised the policy rate from 6.9 per cent to 10 per cent in August 1978. Despite the tightening, inflation rose to 9 per cent by the end of 1979. In August of that year, Paul Volcker was appointed head of the central bank, and his primary goal was to bring inflation down, even at the cost of a temporary rise in unemployment. As a result, the FOMC raised the base rate from 9 per cent in 1981 to 20 per cent. This led to a recession in the early 1980s, but inflation fell from around 15 per cent to 4 per cent. The gross public debt

ratio fell from 45 per cent to 38 per cent over the decade, before rising again to 45 per cent in 1984.

Japan: In response to the oil price shocks, the government suspended the ongoing transport infrastructure development programme to reduce the budget deficit, while the central bank started tightening to address inflationary pressures. The population reacted with panic buying, and in 1974 the economy slipped into recession. In 1975, the government launched a massive fiscal expansion via public investment, while private investment declined. At the same time, monetary policy was eased somewhat to support the economy, which was in the grip of a shock: the central bank lowered the rediscount rate from 9 to 6.5 per cent in four steps. Japan responded to the first oil price shock by restructuring and developing export sectors that require little energy and raw materials (e.g. electronics), while imposing temporary administrative restrictions on energy consumption. After 1979-1982, both monetary and fiscal policy tightened. Japan started the decade with a gross public debt ratio of 12 per cent and ended it at 52 per cent.

V

Similarities and Differences between Inflationary Factors in 1970 and Today

Flóra Balázs

This analysis summarises the similarities and differences between the rapid price rises we are currently experiencing and the inflationary trends seen in the 1970s. In both periods, rising inflation was accompanied by fiscal stimulus and strong supply-side constraints. At present, the demand side may also be providing a stronger boost to inflation, while the stronger anchoring of inflation expectations since the 1970s may be moderating the rise in inflation. Data available until 28 December 2021 were used for this analysis.

Similarities in Inflationary Factors

As in the 1970s, inflation today is also fuelled by significant supply-side constraints and commodity price increases. In the 1970s, a reduction in the oil supply caused a major inflation shock. In 1973, the Arab countries of the members of OPEC imposed an embargo on the US for supporting Israel in the 1973 Arab-Israeli war. Along with the embargo, the drop in oil production at the end of the decade due to the Iranian Revolution also caused a major supply shock. In addition to oil, price of many other commodities also rose significantly in the 1970s. Food prices increased significantly due to several factors. The world's population grew from 2.5 billion in 1950 to over 3 billion in 1960 and 4 billion in 1974, and this population growth caused a significant expansion of global food demand. In addition, the rise in energy prices also fed through to food and service prices in the 1970s. In the early 1970s, the rise in inflation in the US was

fuelled by strong supply constraints and dynamic commodity price rises, as well as government spending and expanding social programmes on the demand side.

Another supply-side factor was the price and wage controls introduced by President Nixon in 1971, which remained in force until 1974. With these measures, Nixon wished to minimise the shock following the suspension of the convertibility of the dollar into gold. The move only temporarily curbed the rise in prices, and in 1974 inflation began to rise sharply again. Today, the rise in inflation is partly due to the reopening of economies following the first waves of the Covid-19 pandemic and the subsequent imbalance between supply and demand.

In both periods, the rise in inflation was preceded by fiscal stimulus, although the extent of this differed (Matthews, 2021). By comparison, the US budget deficit as a share of GDP rose to nearly 15 per cent in 2020, from 4.6 per cent in the previous year, while the deficit rose to 2.8 per cent of GDP in 1968 and to over 3 per cent in 1975-1976, from a level of typically less than 1 per cent.

In 1969, Richard Nixon succeeded President Lyndon Johnson, whose term had seen an increase in the budget deficit compared to previous years, due to the financing of the Vietnam War and his social programme (Great Society). President Nixon, with the support of Congress, continued to fund the war and expanded the social programme in 1972. The social programme created the social security system that still exists today, Medicare, Medicaid and unemployment insurance. As a result of the programme, social security benefits nearly doubled between 1965 and 1973, and thus social expenditure accounted for 7.4 per cent of GDP in 1973. As a result, from 1975 the deficit as a share of GDP rose to over 3 per cent, marking a significant increase compared to the deficits of less than 1 per cent typical in the 1960s. President Nixon kept up pressure on the Fed to keep interest rates, and thus financing conditions, low.

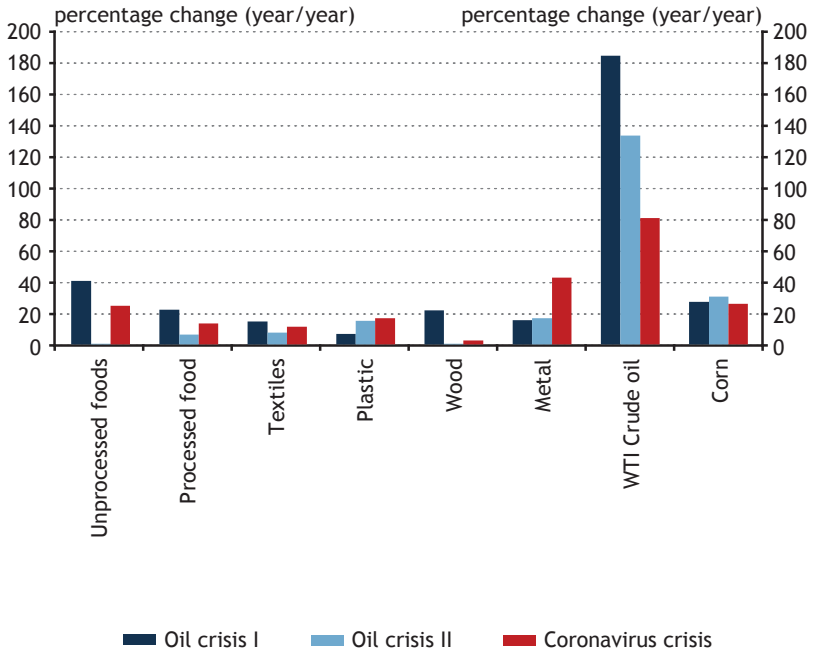
In 2020, following the outbreak of the Covid-19 crisis, the US government sought to counteract the negative effects of the

pandemic with a series of fiscal stimulus programmes. First, US President Donald Trump decided in March 2020 to adopt a package of USD 8 billion and USD 192 billion, followed by a much larger programme called the 'Cares Act' of USD 2,200 billion. In addition to one-time payments directly to households, the Cares Act included increased unemployment benefits, corporate loans and support for state and local governments. In December 2020, Congress passed a new USD 900 billion package as a continuation of the Cares Act, providing temporary funding until newly elected US President Joe Biden announced a new stimulus programme. Joe Biden signed the USD 1,900 billion stimulus package in March 2021, which includes direct payments like the Cares Act, increased unemployment benefits and funds for infrastructure investments and vaccinations. Altogether, the fiscal measures taken to offset the negative effects of the pandemic amount to 27.2 per cent of 2020 US GDP.

The economic changes that took place during the Covid-19 crisis may also lead to the development of stagflation in the 2020s. In the 1970s, high inflation pushed most Western economies into recession, resulting in simultaneous high inflation, high unemployment and stagnant economic growth, i.e. economies faced stagflation. Today, economies are in a recovery phase following the pandemic, but the uncertainties caused by Covid-19 raise questions about when they will return to their previous growth path. So far, there are no signs of protracted stagflation in individual economies, but some factors could increase the risk thereof.

Growth may be substantially restrained if supply-side constraints persist for longer than expected, thereby reducing output and keeping input costs high. Partly in this context, the emergence of a possible commodity super-cycle could raise stagflation risks. Over the past year, prices of key commodities have risen by more than 10 per cent, while prices of corn, metal, unprocessed food and WTI crude oil have risen even more (Chart 1).

Chart 1: Annual change in the price of certain commodities in the year following the onset of the crisis



Source: Bloomberg

The increase in commodity prices was partly due to the Covid-19 crisis, as consumption fell slightly amid a temporary halt in production, before demand started to rise again as uncertainty eased. The Covid-19 crisis also highlighted the fact that outsourcing production makes production cheaper, but at the same time it can compromise security of supply. This could set off a wave of deglobalisation and the repatriation of production. In addition, if labour shortages become permanent, wage increases could raise input costs. The latter would not increase the risk of stagflation in its own right, but together with a sustained rise in commodity prices, it could increase such risk. This could lead to a slowdown in world trade, and higher production costs could generate a general price rise.

Differences between Inflationary Factors

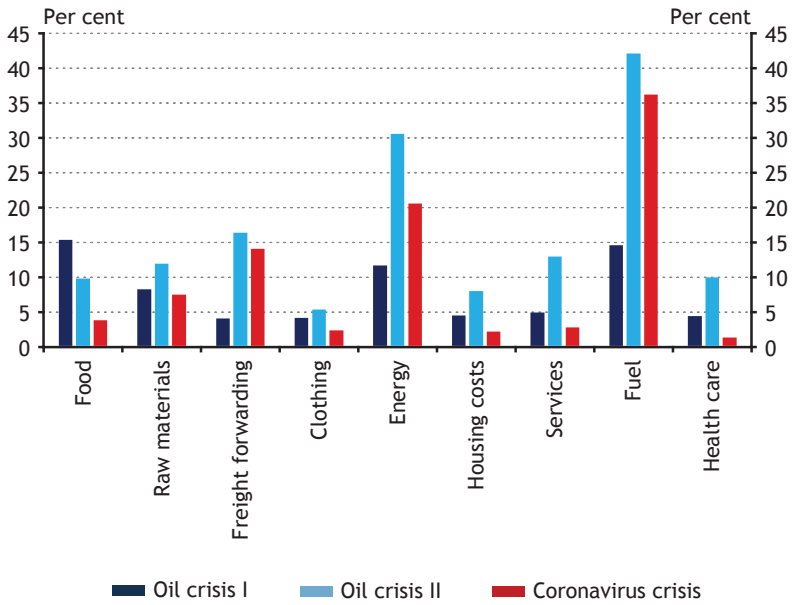
Since the 1970s, the structure of economies has changed significantly. Exchange rates are relatively free floating in most economies, which helps to cushion trade shocks. At the same time, in the decades following the 1970s, huge labour reserves were injected into the global economic cycle, and in the last decade there has been a shift towards labour shortages, partly on the demographic and partly on the technological side. As a result, the bargaining power of workers will strengthen again in the 2020s after decades of weakening, which could reinforce inflationary trends. Significant wage increases close to or above the rate of inflation are not yet reflected in the data. The fact that with the widespread use of the internet, more and more products are becoming available to consumers, and it is also possible to compare prices more easily, has an effect that counteracts the labour market processes, which strengthens competition between companies and may be a limitation in terms of companies' pricing power. This could prevent inflation from rising to an extent seen in the 1970s. However, this is weakened by the ongoing supply chain disruptions. Compared to the 1970s, there has also been a significant change in fiscal policy and debt processes. Partly as a result of the government response to the Covid-19 crisis, global public debt as a share of GDP has risen to levels not seen since World War II. The introduction of significantly larger fiscal stimulus measures than in the past points to the possibility of demand-side inflationary pressures in the global economy, in addition to supply-side factors.

Monetary policy is now independent, and inflation expectations are also anchored. In the 1970s, the goal of monetary policy was to achieve full employment and price stability, while the Fed's decisions were geared towards achieving full employment. In the 1970s, reducing inflation could often only have been achieved

by incurring real economic costs that the central bank was unwilling to bear. By the end of the 1970s, however, economic agents became increasingly dissatisfied with high inflation and confidence in the central bank deteriorated significantly. A change was brought about by Federal Reserve Chairman Paul Volcker, whose election as Fed Chairman marked a shift to monetary aggregate targeting and who made it clear that lowering inflation was only possible at a temporary cost to the real economy. In the early 1980s, the US economy went into recession, but inflation started to fall and concurrently the Fed gradually began to regain credibility. Today, most central banks operate within a framework of inflation targeting, the primary objective of which is to ensure price stability. Experience so far suggests that in economies where central banks have moved to inflation targeting, inflation rates have stabilised at low levels and the inflation expectations of economic agents are anchored at low levels. This change in monetary policy reduces the risk of inflation expectations rising significantly and creating an inflationary spiral through an orientation to expectations.

At present, the rise in inflation is mainly driven by above-average increases in the prices of a few product groups, but this could spill over to a wider range of goods and services. While in the US in the 1970s, several sub-indices showed simultaneous, larger increases along with the inflation index, inflation and the individual sub-indices are currently rising at a more moderate pace than in the 1970s (Chart 2).

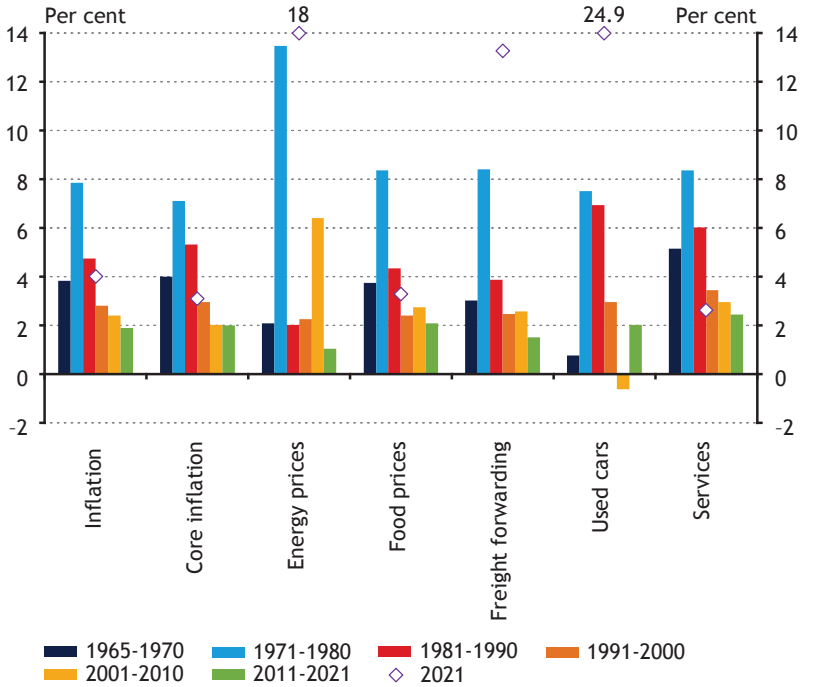
Chart 2: Average development of inflation sub-indices in the USA



Note: Time periods examined: Oil Crisis I: January 1973 - March 1974; Oil Crisis II: January 1979 - July 1980; Covid-19 Crisis: January 2021 - November 2021
Source: FRED

During the first oil price shock, in addition to the rise in energy prices, food prices in the US also rose at a significant pace, averaging 15 per cent on an annual basis, while price increases in services and transportation were high, but not extreme. However, during the second oil crisis, inflation accelerated across a much wider range of product groups, with double-digit increases in services, transport and raw materials, in addition to energy prices. Today, some of the sub-indices are showing sharp increases (e.g. energy prices, raw materials, transportation in the case of the US), while the other sub-indices are showing more moderate price increases (Chart 3).

Chart 3: Trends in inflation sub-indices in the US by decade

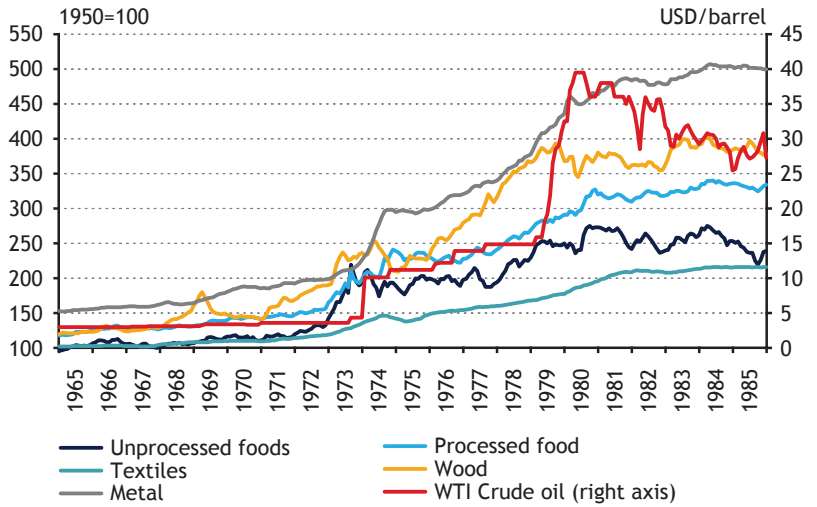


Source: FRED

In recent months, however, a growing number of central bank policymakers have stressed that inflation could remain higher than previously expected and that price increases could affect a wider range of products, which is now starting to be reflected in the actual data (Lagarde, 2021; Waller, 2021). Comparing the price rises seen in the raw materials market with the 1970s, the prices of all of the raw materials under review, with the exception of metal and oil, rose at a similar rate. While oil prices have now risen less than during the first two oil crises, metal prices have risen more than in the 1970s. During the first and second oil crises, the price of WTI oil nearly tripled, while the price of oil per barrel currently shows a rise of 80 per cent. In the year following the outbreak of the two oil crises, it was mainly the price of crude oil

that rose, but other commodity prices later also showed significant increases (Chart 4).

Chart 4: Price index trends for some commodities during the two oil crises



Source: Bloomberg

VI

In-depth Analysis of Cost Shocks in the 1970s and Their Impact

Flóra Balázs

This analysis examines the cost shocks of the 1970s and their effects, focusing on the US. As today, a number of cost shocks in the 1970s led to a significant rise in inflation. The most important of these were the first and second oil price shocks; however, the rapid rise in food prices and the removal of price and wage controls in the early 1970s also contributed to the increase in inflation in the US. The monetary policy response by the Federal Reserve was initially inadequate and led to stagflation, i.e. high inflation and slow growth, which was only overcome at the end of the decade at considerable cost to the real economy. Data available until 3 March 2023 were used for this analysis.

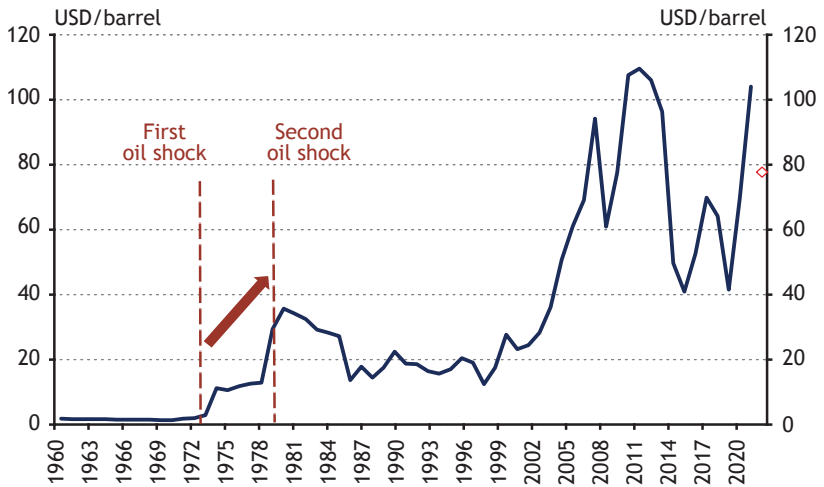
Many people are comparing current macroeconomic developments to events in the 1970s, as there are numerous similarities between the two decades. The supply disruptions caused by the Covid-19 crisis and the energy crisis caused by the Russian-Ukrainian war are reminiscent of the oil price shocks of the 1970s. A deeper examination of the 1970s can provide lessons for the current inflationary trends, and we thus analyse the factors leading to high inflation in the 1970s.

Energy Shock

The 1973 oil embargo caused oil prices to quadruple. In October 1973, US President Richard Nixon asked Congress for USD 2.2 billion in aid to Israel in the Yom Kippur War between Israel and the Arab coalition led by Egypt and Syria. This request for

aid prompted the Organisation of Arab Petroleum Exporting Countries (OAPEC) to impose an oil embargo on the US. The embargo stopped US oil imports from OAPEC, and OAPEC also reduced its production in several steps, causing a significant increase in the oil price (Chart 1).

Chart 1: Annual average OPEC oil price per barrel from 1960 to 2022



Note: The figure shows the January data for 2023

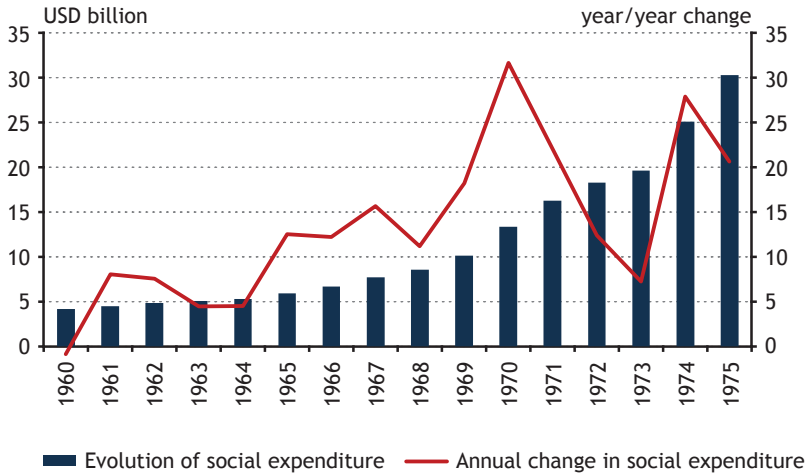
Source: Statista

While the price of oil before the embargo was around USD 2.9 per barrel, after the embargo was imposed the price of oil rose nearly fourfold to almost USD 12 per barrel by January 1974. In March 1974, OAPEC finally lifted the embargo against the US, but oil prices remained high.

The expansionary fiscal policies of previous years and the collapse of the Bretton Woods system also contributed to the persistence of high energy prices. The rise in prices, including commodity prices, began as early as the 1960s, owing to US

government spending on the Vietnam War and the 'Great Society' programme, which was accompanied by an increase in social spending (Chart 2).

Chart 2: Trends in social spending in the USA



Source: FRED

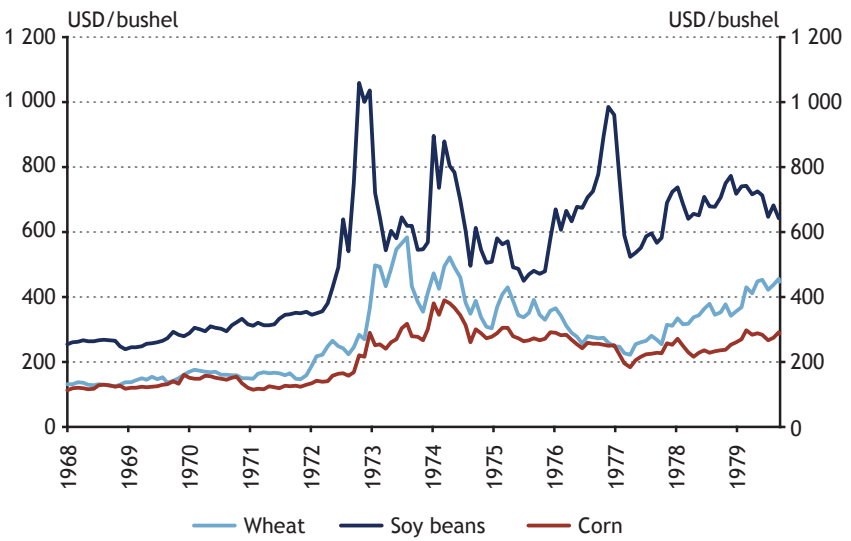
In 1973, the wholesale price of industrial raw materials rose by more than 10 per cent on an annual basis. The situation was exacerbated by the fact that the US economy was unable to respond to the extra demand generated by expansionary fiscal policy by increasing production, due to its limited excess production capacity. Devaluation of the dollar in the early 1970s, after the collapse of the Bretton Woods system, was also an important factor in the rise in oil prices. Since the price of oil was fixed in dollars, the weaker USD caused OPEC nations' revenues to fall, so the price of oil was pegged to gold. With the end of the Bretton Woods system, the convertibility of the dollar into gold was abolished, and the price of gold rose from a fixed USD 35 to USD 455 per ounce by the end of 1970.

The second oil shock of the decade was also linked to events in the Middle East. The Iranian Revolution, which erupted in 1978 and ended a year later, reduced Iran's oil production by 4.8 million barrels a day: this was a significant reduction, considering that it represented 7 per cent of global production at the time. The Iranian Revolution also generated uncertainty, which triggered large-scale speculative buying in the oil market. Coupled with already strong global demand, this led to a significant hike in oil prices. Oil prices started to rise in mid-1979 and more than doubled between 1979 and April 1980.

Food Price Shock

In addition to energy prices, the other major item that led to surging inflation in the 1970s was the rise in food prices. Wheat, corn and soy bean prices started increasing in 1971 (Chart 3).

Chart 3: Price trends for wheat, corn and soy beans



Source: Bloomberg

The price rises were driven by a rapid increase in global demand. In the early 1970s, the Soviet Union made unexpectedly large purchases of grains, which boosted global demand. In addition to the Soviet Union, other countries with planned economies decided to increase their grain imports. World wheat exports rose by almost 29 per cent between 1971 and 1972.

The abundant revenues of oil-exporting countries also boosted demand for grains During the 1970s, global imports of agricultural commodities increased by 4.8 per cent annually.

In addition to increased demand, poor weather conditions led to a contraction of supply, which further increased food prices. The bad weather also had an impact in the US, Australia, Canada and the Soviet Union. The smaller-than-expected harvest forced the Soviet Union to import more grain from the world market. Due to bad weather conditions, food prices rose by only 5 per cent in 1972, with a rate of 20 per cent recorded in 1973 and 12 per cent in 1974. According to calculations by Alan Blinder, US economist and former Federal Reserve vice-president, between 1973 and mid-1975, US inflation was boosted 5 percentage points by rising food prices.

In the 1970s, many countries took measures to reduce the impact of rising grain prices on their own economies. In several cases, governments imposed export taxes and restrictions on exports. Grain-importing countries reduced tariffs on these products, built up stocks and provided price support for the products concerned. These measures further exacerbated the imbalance between supply and demand.

End of Price and Wage Controls

President Nixon tried to remedy the economic difficulties with government measures. Nixon, who took office in 1969, found himself in a difficult situation by 1971, with unemployment in the United States rising to 6.1 per cent and inflation at 4.3 per cent. The US President took radical action and in August 1971, in a package of measures known as the 'Nixon shock', he abolished the convertibility of the dollar into gold, essentially ending the Bretton Woods system, and, in order to curb inflation, he first froze prices and wages for 90 days and later extended controls in order to be re-elected. During the most severe first phase of 90 days, prices, wages and rents were completely frozen. During the period from November 1971 to January 1973, price controls were lifted, but price and wage increases were kept within tight limits. However, price controls only temporarily restrained price rises, and when they were lifted, prices just started to rise more steeply.

In 1974, price and wage restrictions ended for the most part. In early 1973, the price freeze was lifted by the government, causing inflation to rise again, and thus President Nixon announced new controls in June 1973, which provoked considerable public opposition. Price controls led to a further deterioration in the balance between supply and demand, with a general shortage of certain products. By 1974, price controls were gradually phased out, with only oil remaining under price control until 1979.

Monetary Policy and Cost Shocks

In the early 1970s, monetary policy came under considerable pressure. The official aim of the US Federal Reserve was to support economic growth while avoiding excessive inflation, but in practice President Nixon put considerable pressure on Fed

Chairman Arthur Burns to keep interest rates low to provide the government with cheap funds, so that he would be re-elected in 1972. With inflation rising, the central bank's narrative was that the origin of inflation was cost-side, i.e. caused by input price increases, which was outside the scope of monetary policy. Burns believed that the Fed should not intervene because rising inflation was the result of structural problems that could not be addressed by monetary policy.

The inadequate monetary policy response to rising inflation led to stagflation. The economic policy mix that was applied failed to boost the economy or reduce inflation. Unemployment was around 6 per cent in the early 1970s, and the economy was in recession from 1969 to 1970 and again from 1973 to 1975. This was accompanied by high inflation, with consumer price inflation peaking at 12.3 per cent in late 1974 and 14.6 per cent in the spring of 1980.

During the second oil shock, the Fed maintained a relatively loose monetary policy stance and it was not until late 1979 that a turnaround occurred in monetary policy. The Fed was pursuing a loose monetary policy in an attempt to reduce unemployment, but this was not successful. Inflation, on the other hand, rose gradually, from less than 5 per cent in early 1976 to 9 per cent by the end of 1979. Fed policymakers expressed concern about rising inflation and, although they raised the policy rate from 6.9 per cent in April 1978 to 10 per cent by the end of the year, they did not commit to sufficiently aggressive tightening. The interest rate increase was a clear sign that the central bank wanted to curb further price rises, but economic historians subsequently saw the move as restrained and insufficient.

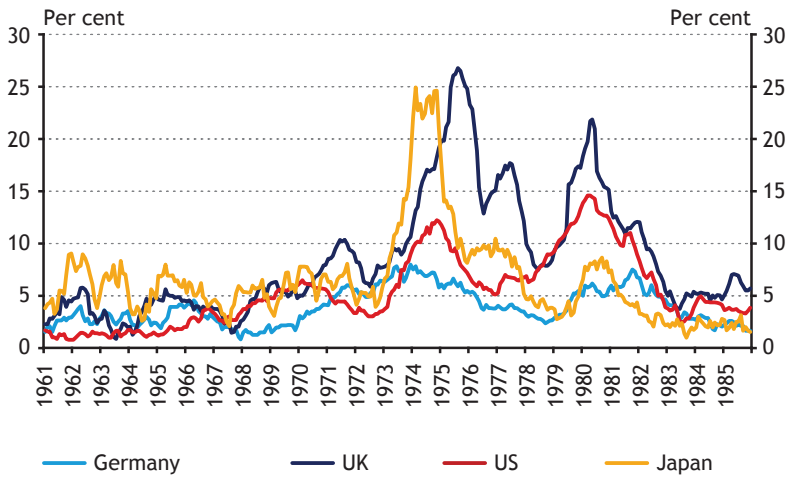
In 1979, a new central bank governor moved the central bank towards a tighter orientation. In August 1979, Paul Volcker was appointed Fed Chairman with the primary goal of bringing down inflation. Under Volcker's leadership, the Fed raised the policy

rate from 11 per cent at the end of 1979 to 19 per cent in 1981. Aggressive monetary policy successfully ended the period of stagflation, bringing inflation down from a peak of 15 per cent to 4 per cent by the end of 1982. Disinflation, however, came at a significant cost to the real economy, and the US slipped into a severe recession.

Global Developments

The cost shocks of the 1970s had impacts at the global level (Chart 4). Inflation rose sharply in most developed countries in the early 1970s during the first oil price shock and again in the late 1970s during the second oil price shock.

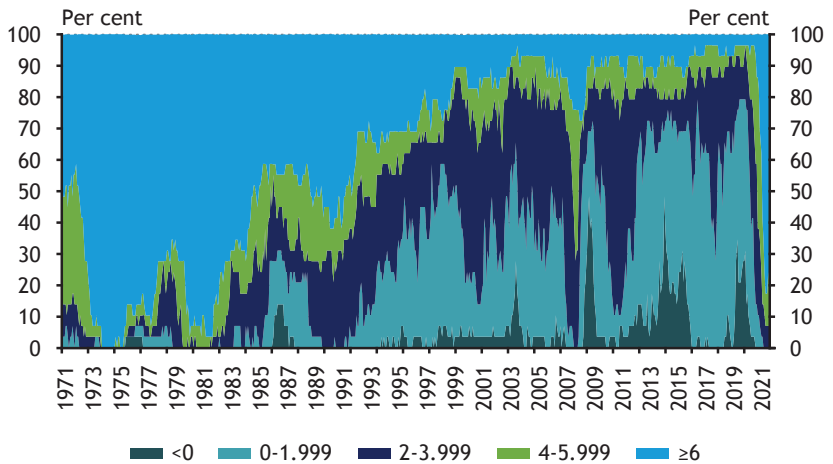
Chart 4: Inflation rates in the US, Germany, Japan and the UK



Source: FRED

The global nature of inflation is illustrated by the fact that, according to an OECD analysis of 29 countries, the vast majority recorded inflation rates above 6 per cent during the two oil shocks (Chart 5).

Chart 5: Distribution of inflation rates between 1971 and 2022 in the 29 countries studied



Note: The 29 countries surveyed were Austria, Belgium, Canada, Chile, Colombia, Denmark, Finland, France, Germany, Greece, Iceland, India, Indonesia, Israel, Italy, Japan, Korea, Luxembourg, Mexico, the Netherlands, Norway, Portugal, South Africa, Spain, Sweden, Switzerland, Turkey, the United Kingdom and the United States.

Source: OECD

Despite the fact that most economies were affected by external shocks, inflation rates rose to varying degrees over the decade, largely due to monetary and fiscal policy developments. In the US, fiscal policy was already loose before the 1970s, which, combined with a delayed monetary tightening, led to double-digit inflation. By contrast, inflation rates in Germany remained below 10 per cent during the first and second oil price shocks and,

compared to the US, the inflation rate differential amounted to several percentage points. Following the collapse of the Bretton Woods system, Germany switched to a floating exchange rate in March 1973, which opened up new scope for the Bundesbank to set monetary conditions. From then on, the Bundesbank fought inflation by tightly controlling monetary aggregates. During the second oil price shock, central banks were able to tighten monetary conditions with the experience of the first oil price shock behind them, which meant that inflation was typically brought down more quickly than at the beginning of the decade.

VII

Developments in Commodity and Financial Markets in the 1970s

Péter Aradványi – Olivér Nagy

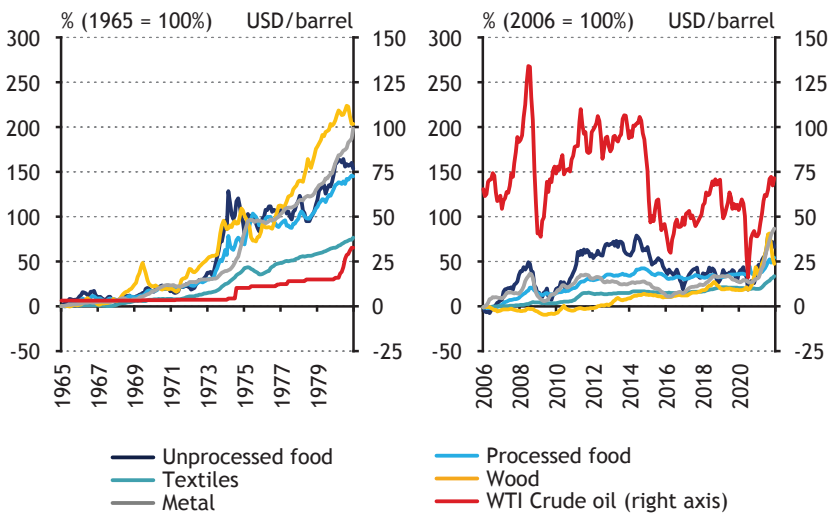
This study summarises the main aspects of commodity and financial market developments during the period, and their similarities and differences compared to current events. It can be said that, although the general and sustained increase in commodity prices in the 1970s has not yet been observed today, the prices of several commodities have risen significantly over the past year, in line with the time-weighted rate of price increases at that time. The financial market dynamics of the 1970s and today show differences, and the transformation of the market structure is indicated by the fact that, in addition to the physical markets, a significant portion of the turnover takes place in derivative markets for commodities. There is no similarity between the performance of listed companies and the evolution of government bond market yields between the period of the oil price shocks and today. Data available until 18 January 2022 were used for this analysis.

Raw Material Market Developments

Commodity prices rose sharply on a broad basis in the 1970s. Two reasons are typically given in the international literature for these increases. Analogous to the current situation, many commodities experienced larger shortages (Cooper and Lawrence, 1975), but historically this can be traced back to the decline in raw material production-related investment in the late 1960s (Clark, 1979), which contributed to the resulting shortages on the supply side.

In the first third of the 1970s, the price of raw materials doubled. Market prices for wood, metals and food typically rose by 50 to 100 per cent between 1965 and 1973. Since 2020, price increases for some commodities have been similar and sometimes even higher. In the shorter term, on an annual basis, the prices of the raw materials studied, apart from metals and oil, have risen at a rate broadly similar to the 1970s. While oil prices have now risen less than during the two oil crises, metals prices have risen more than in the 1970s. The latter is also significant because higher metal prices can quickly feed through to consumer prices via car manufacturing, maintenance and transport. In terms of oil prices, during the two oil crises, the price of WTI oil almost tripled, while currently the price of oil per barrel is up around 80 per cent on an annual basis. However, for all commodities, looking at a decade-long trend, price increases are lower for the time being (Chart 1).

Chart 1: Evolution of commodity prices in the 1970s and the last 15 years



Source: Federal Reserve Economic Database

Hedging inflation in the commodity market led to an upward commodity price-consumer price inflation spiral in the 1970s. According to early Bank of England analysis (Bank of England, 1981), fears of inflation in the markets led market participants to start buying commodities as inflation hedges. As a result, markets contributed to the rise in actual inflation through a self-generated increase in output prices. The risk of this still exists today, due to further deregulation and liberalisation of financial markets. Another similar phenomenon is the 'bullwhip effect' described today, whereby the accumulation of reserves at key points in global value chains creates excess demand and limits the healthy geographical flow of raw materials.

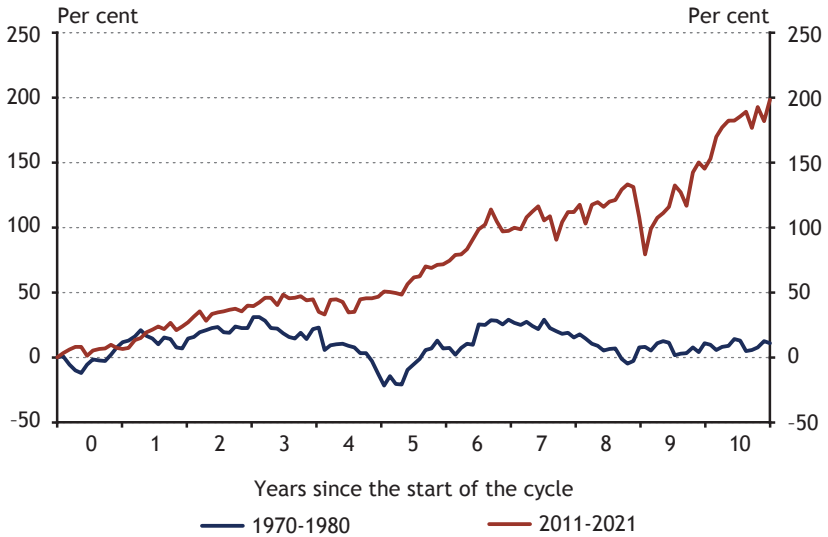
Financial Market Developments

In the 1970s, the performance of stock market indices was generally subdued. Fears of inflation led to a decade of poor stock market performance in the 1970s, with significant asset price volatility. After several declines, the major indices reached their 1969 levels by the early 1980s. The latter is mainly explained by the fact that stagflation and the rising interest rate environment underpinned the stock market downturn that characterised the decade, with investors speculating mainly in commodities rather than equities.

There are significant differences between financial market dynamics in the 1970s and today. In the 1970s, the DJIA index's performance was subdued, and over a decade, the cumulative realised return of 12 per cent can be viewed as a sideways move. By contrast, the Dow Jones' performance over the past ten years has been explosive, with a cumulative realised return of 200 per cent, making it one of the most successful decades in the index's history (Chart 2). If we take the pre-pandemic values of the indices at the end of 2019 as a baseline, the S&P500 stock index has risen

by 44 per cent and the DIJA index by 26 per cent in just over two years.

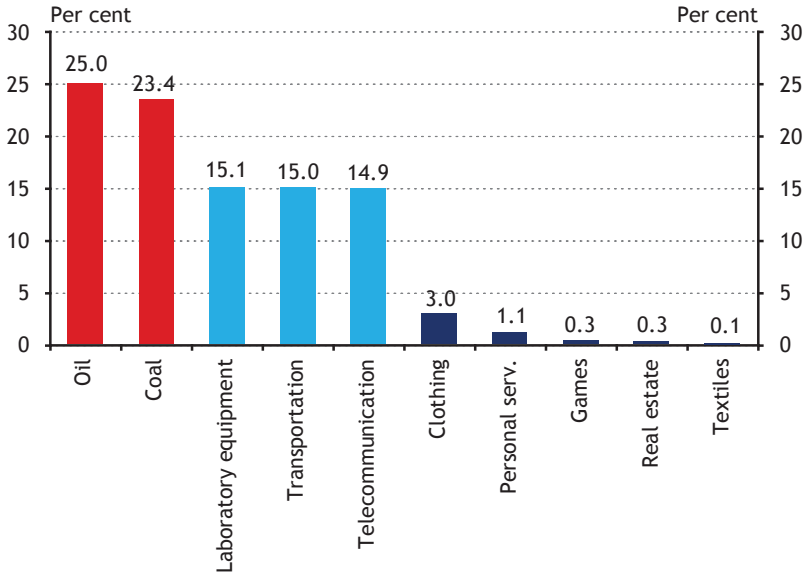
Chart 2: Dow Jones Industrial Average cumulative return in the 1970s and the past 10 years



Source: Yahoo Finance

Companies in the raw material extraction and high-tech industries have generated significant returns on the stock market. Corporate performance varied by industry during the 1970s. Many industries, such as housing-related companies, clothing apparel distributors, and the service sector in general, recorded stock market returns of 0 per cent between 1969 and 1980. Meanwhile, coal and oil extraction and processing companies produced average annual returns between 23 and 25 per cent in the 1970s, while aggregates for telecommunications and transportation companies generated average annual returns of around 15 per cent during the period (Chart 3).

Chart 3: Annual average returns by industry in the 1970s



Source: Kenneth French Data Library

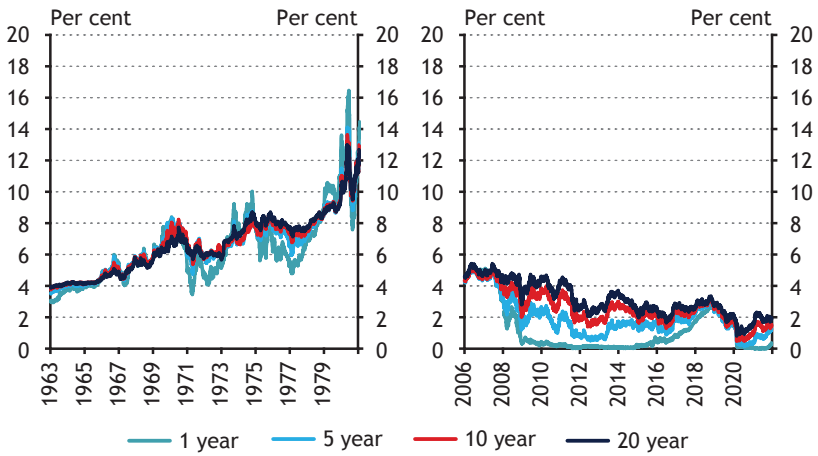
Trends in the government bond market also show different patterns. Before the 1970s, the US government bond market was characterised by an upward shift in the yield curve. Government bond yields hovered in the 6 to 8 per cent range for most of the 1970s, before rising to above 12 per cent for long-term yields and 16 per cent for short-term yields as a result of the tighter central bank policy at the end of the decade (Chart 4). By contrast, the past 15 years have been characterised by low returns, with no maturity segments exhibiting a steady uptrend. In this respect, there has been no significant shift since the beginning of 2020, with government bond market yields remaining low, but volatile.

The relative movements of the stock and bond markets are also different today than in the 1970s. According to analysts at BlackRock,[1] the 10-year correlation between the S&P500 and the

[1] Comparing Today's Stock Market With The 1970s | BlackRock | BlackRock

10-year government bonds price, while similar in magnitude, shows an opposite relationship in sign. While equity prices in the 1970s showed a moderately strong, negative correlation with bonds, the last decade has been characterised by positive co-movement.

Chart 4: Trends in US government bond yields in the 1970s and the past 15 years



Source: Federal Reserve

Conclusion

Commodity market trends in the early 2020s show some similarities and some differences compared to trends in the 1970s. In terms of dynamics, one similarity is that both now and in the period following the first oil price shock, sudden and significant price increases covering a relatively wide range of raw materials were observed. Unlike in the 1970s, we are not yet seeing a prolonged rise over several years, but the prices of several commodities have risen significantly over the past year, in line with, and sometimes more than the time-weighted rate of price increases at that time. As for the underlying causes, the same is true for both periods, with supply lagging behind

demand leading to dynamic increases in commodity prices. The difference, however, is that while today this is mainly due to pandemic-related lockdowns, supply chain problems and surging demand after reopening, in the 1970s the increases were mainly due to structural reasons – limited capacity resulting from reduced investment. In addition, the inflationary spiral of the two oil price shocks in the 1970s further fuelled commodity prices. Another important difference is that, due to changes in the market structure, for most commodities a significant part of the turnover now takes place on the derivative market, in addition to the physical market.

Financial market developments in the two periods show differences. While most of the leading stock indices rose relatively quickly to new historic highs following the downturn caused by the Covid-19 crisis, the early 1970s were characterised by a slow rise in the stock market. The difference is most striking in the case of government bond markets, as the current period was preceded by an extremely low and typically declining interest rate environment that lasted for more than 10 years. In this respect, there has been no significant shift since the beginning of 2020, with government bond market yields overall remaining moderate, but volatile. By contrast, the period before the 1970s was characterised by a sustained upward trend in returns, which, apart from temporary setbacks, continued throughout the 1970s.

VIII

Energy Market Developments in the 1970s and in the 2020s Decade

Dorina Kirtág

This study presents and compares the energy market developments following the two oil price shocks of the 1970s with the current energy market trends. As in the 1970s, the energy market situation and the evolution of energy demand and the energy mix, which are influenced by geopolitical developments and the transition towards sustainability, remain key factors today. The current energy crisis shows some parallels with the oil shocks of the 1970s. While the breakdown of the Bretton Woods system in the early 1970s caused instability, the onset of the 2020s has seen the Covid-19 pandemic destabilising economies. In a high-inflation environment, geopolitical events in the Middle East triggered an energy crisis in the 1970s, and in 2022 the Russian-Ukrainian war had similar consequences (Kiss, 2022). Data available until 10 March 2023 were used for this analysis.

Introduction

After nearly three decades of almost constant economic growth, the world's countries faced their first major energy crisis in 1973. Following the outbreak of the fourth Arab-Israeli war, the Arab members of the Organisation of the Petroleum Exporting Countries (OPEC) imposed an oil embargo on countries supporting Israel in the Yom Kippur War in October 1973 (Bini et al, 2016). The embargo caused the world price of oil to quadruple from USD 3 to USD 12 per barrel by 1974, compared to the previous year. During the first oil crisis, fuel shortages and panic set in, inflation and unemployment rose sharply in several

countries, coupled with an economic downturn. Although the oil embargo was lifted in March 1974, oil prices remained high.

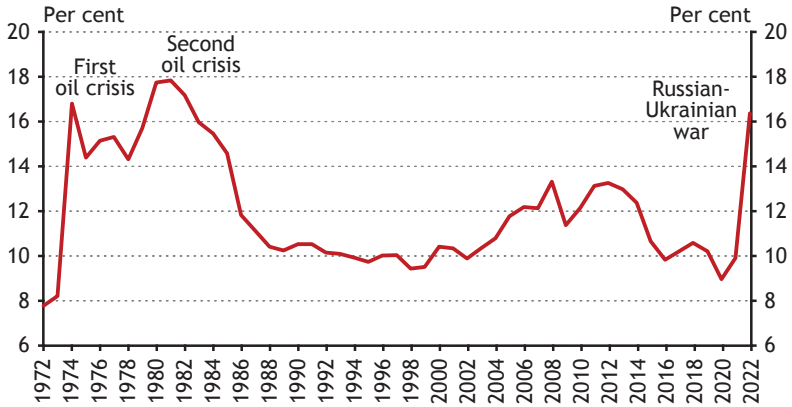
At the end of the decade, the drop in production caused by the Iranian Revolution led to a second oil price surge and posed new challenges for importing countries. By November 1978, some 37,000 workers had gone on strike in Iranian oil refineries. By January 1979, Iran's oil production had fallen by 4.8 million barrels per day, representing 7 per cent of world production at the time (Gross, 2019). The supply disruption triggered panic in the markets, causing further increases in prices. After the second oil price surge, oil prices reached USD 30 per barrel. Subsequently, another geopolitical event, the Iraq-Iran war, which began in September 1980, also had an impact on oil prices. As a result of this war, production in both countries fell, and the price of oil rose again to USD 35 per barrel and fell significantly again in 1986.

Oil-importing countries found it difficult to change their energy consumption patterns at short notice and faced significantly increased import costs (James, 1996). In 1973, nearly 75 per cent of the European Community's oil imports came from the Middle East, which accounted for about 60 per cent of Europe's energy mix (Gross, 2022).

Effects of the Oil Crises of the 1970s

In the OECD member countries, energy expenditure as a share of GDP doubled following the first oil crisis, increasing by nearly 8.5 percentage points in 1974 (Chart 1). Of this, more than 6.5 percentage points was linked to oil products. The second oil crisis in 1979 led to an increase of 3.5 percentage points in energy expenditure as a share of GDP in two years (OECD, 2022). The oil crisis also affected countries beyond the OECD member countries. In addition to the oil crisis, less developed non-oil exporting countries faced a sharp rise in world food prices (Sargent, 2013).

Chart 1: Energy use as a percentage of GDP in OECD countries



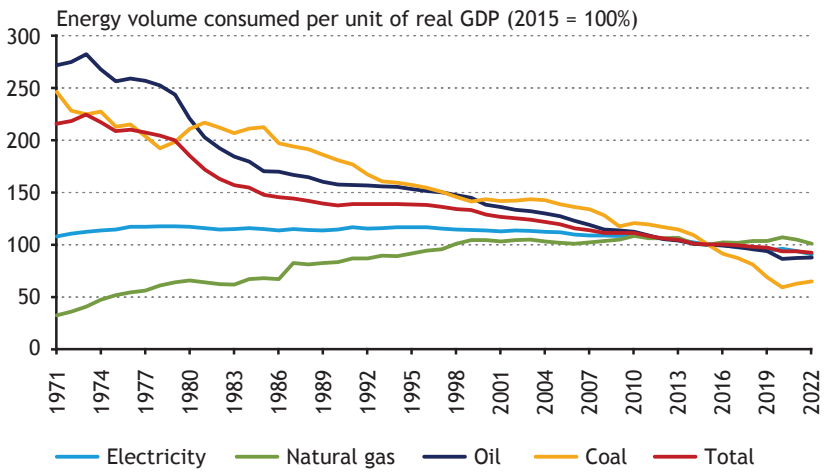
Source: OECD

In the 1970s, following the sudden, sharp rise in energy prices, some economies tried to react by restructuring and shifting towards the production of goods that required less raw materials and energy. There was also a stronger emphasis on exploring and developing new hydrocarbon reserves in order to reduce imports. In the 1970s, Britain and Norway began deep-sea drilling in the North Sea, and new oil fields were discovered in Alaska and Mexico. This contributed to an increase in non-OPEC oil production.

After the first oil crisis, the share of Middle Eastern imports in the energy supply of Western European countries fell significantly, while Soviet hydrocarbon imports increased (Szemerkényi, 2007). Owing to new resources, global price pressures and the rapid inflation eased in North America and Western Europe. In the five years following the second oil price shock in 1979, the share of oil in the energy mix in developed economies fell by more than 7 percentage points.

In response to the oil shocks, significant efforts were also made to improve energy efficiency and promote energy saving (Bösch-Rüdiger, 2014). Among other things, this led to improved energy efficiency for cars and buildings. In response to the oil crisis, several countries introduced Sunday driving bans and speed limits on motorways. Oil-fired thermal power plants converted to gas or coal, and the spread of nuclear, hydro and wind generation also accelerated. Energy intensity in the OECD economies declined steadily after the first oil crisis (Chart 2), dropping by more than 50 per cent between 1971 and 2021 (Barnard – Ollivaud, 2023).

Chart 2: Energy intensity trends in OECD countries



Source: OECD

The decline in demand caused economic instability in OPEC countries in the 1980s, which eased by the end of the decade. The 1990s and 2000s were characterised by market volatility, while US shale oil production weakened OPEC's position in the 2010s. Consequently, in 2016 the OPEC members and ten other oil-producing countries, including Russia, joined forces under the name OPEC+ to improve their market position and restore stability to the oil market.

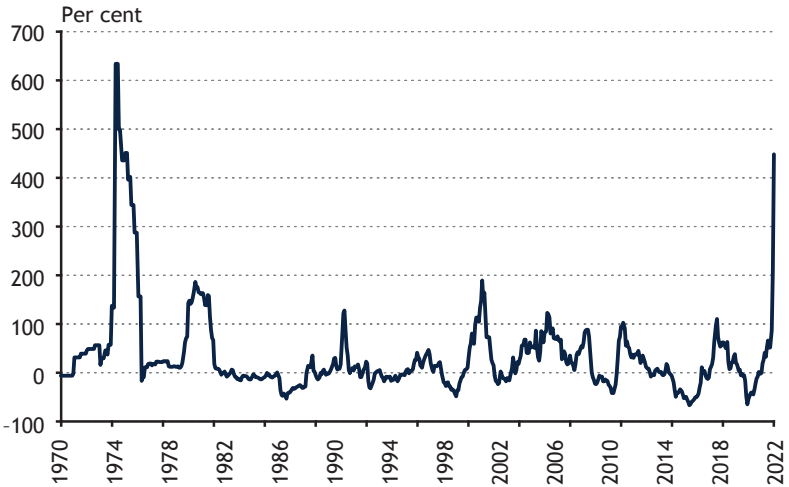
Impacts of the Russian-Ukrainian War

Just as in the 1970s, geopolitical events have triggered an energy crisis today as well. Russia's invasion of Ukraine on 24 February 2022 led to major disruptions in the production and trade of goods exported by these two countries, with widespread implications for the global economy and the energy sector outlook. In 2021, Russia was the world's largest exporter of gas, and second only to Saudi Arabia in terms of oil exports.

The geopolitical conflict has led many countries, including the European Union members, to take steps to reduce energy imports from Russia and announce sanctions against the country. In addition to financial and technological sanctions, the EU imposed an embargo on coal imports in August 2022, a ban on imports of Russian seaborne oil from December 2022 and a ban on refined petroleum products from February 2023. Furthermore, the G7 countries, EU Member States and Australia agreed to introduce a price cap of USD 60 per barrel for Russian seaborne oil from 5 December 2022. In response, Russia decided not to supply oil to countries that supported the introduction of the oil price cap.

The Russian-Ukrainian war triggered an energy price shock not seen since the 1970s (Chart 3). Some commodity prices were already rising before the war, but the rate of increase accelerated dramatically afterwards.

Chart 3: Evolution of energy prices since 1970

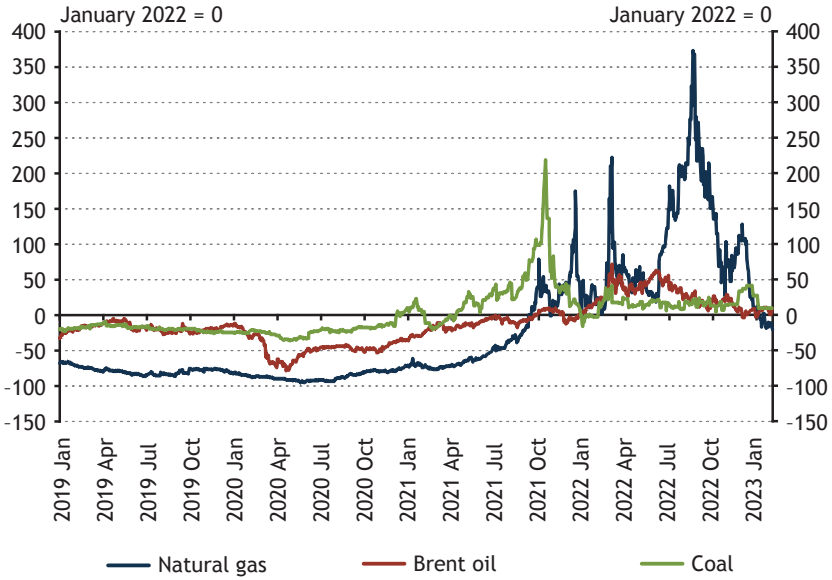


Note: The graph shows the percentage change in monthly price indices over a 23-month period. Due to limited data availability, energy price developments were approximated by oil price changes before 1979.

Source: World Bank

The largest increase was registered for natural gas prices (Chart 4), as Russia cut its pipeline gas exports to Europe by around 80 per cent in September 2022 compared to the previous year. Monthly data show that the price of natural gas more than tripled between January and August 2022. Energy prices, however, started to fall from the historically high levels in autumn 2022 due to slowing global growth and recession fears. In response, in November 2022 the OPEC+ countries decided to reduce their oil production by two million barrels a day, after which oil prices rose again.

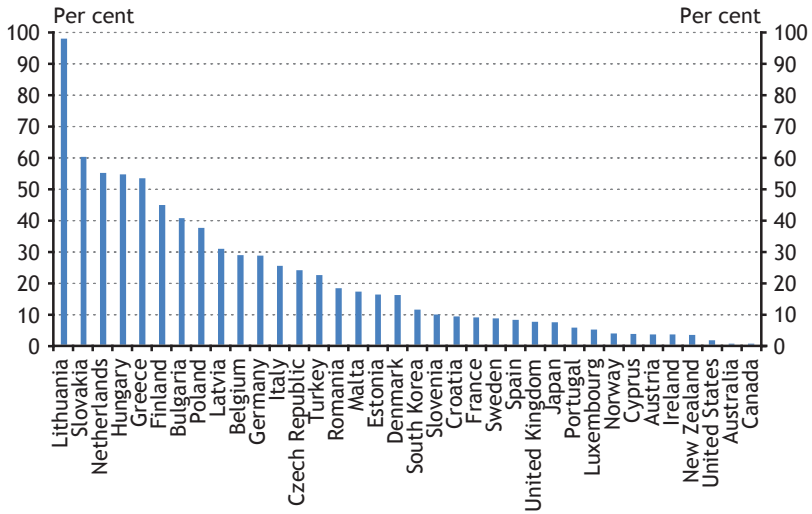
Chart 4: Evolution of certain commodity prices in recent years



Source: Bloomberg

The global energy crisis triggered by the Russian-Ukrainian war has heightened concerns about energy security and the inflationary impact of higher energy prices on economies. In 2020, Lithuania had the highest share of Russian hydrocarbon imports in total energy supply of any country in the world, at nearly 98 per cent. Six countries – Lithuania, Slovakia, the Netherlands, Hungary, Greece and Finland – purchased more than 40 per cent of their annual hydrocarbon needs from Russia (Chart 5).

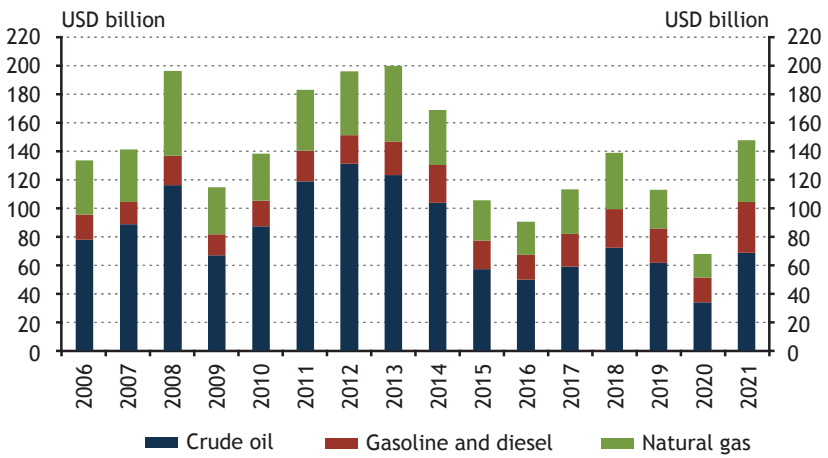
Chart 5: Share of hydrocarbon imports from Russia in total energy supply (2020)



Source: Statista

According to estimates, the European Union and the United Kingdom imported USD 147.8 billion worth of oil, petroleum products and natural gas from Russia in 2021 (Chart 6).

Chart 6: Value of energy imports from Russia to the EU and the UK



Source: Statista

Energy price inflation varies from country to country depending on the level of energy efficiency, the structure of the economy and government policies. In 2022, the estimated increase of 7.8 percentage points in energy expenditure as a share of GDP in OECD countries is similar to that observed in 1974. The OECD has pointed out that over the past five decades, an OECD-wide recession occurred when the share of energy expenditure in GDP was high (at least 13 percent) and rising. The rapid rise in estimated OECD-wide energy expenditures to around 17 per cent of GDP in 2022 could be a warning sign of the short-term risk of a widespread recession (OECD, 2022).

Similarities and Differences between Energy Market Developments in the 1970s and Today

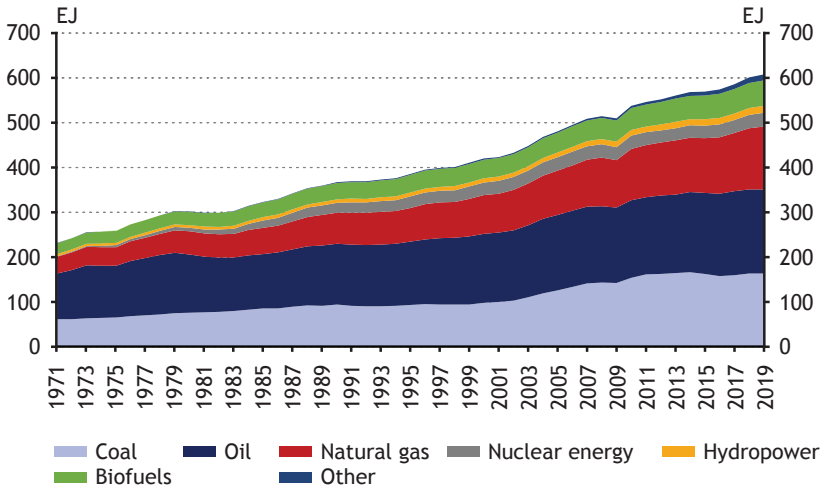
During the 1973 oil crisis, oil-exporting countries imposed sanctions on Western nations, while in 2022, importing countries implemented restrictive measures. In both cases, the disruption of supply created an energy security crisis and highlighted the need for greater diversification of energy sources and supply routes. The price shocks of the 1970s were mainly confined to oil, whereas the current energy price increases are broader based, with gas and electricity contributing significantly.

The oil crises of the 1970s led to the discovery of new reserves and a permanent reduction in demand for oil, due to substitution by other energy sources and improvements in energy efficiency. Energy intensity has declined in many countries in recent decades. Today, however, due to the widespread increase in energy prices, there is less room for substitution of the most affected energy resources, such as natural gas and coal, compared to the 1970s.

In response to the current crisis, the European Union is attempting to increase its gas imports from alternative sources. In 2022, the EU adopted a regulation on the strategic restocking of gas storage facilities, and Member States committed to voluntarily reduce demand for natural gas by 15 per cent in the winter of 2022. Several countries such as China and Germany have increased their use of coal in power generation. Germany has also extended the operating lifetime of several nuclear power plants, and other countries have developed plans to reduce energy demand. The United States is tightening fuel efficiency requirements, while the European Union is encouraging the installation of heat pumps. High fuel prices could boost interest in electric vehicles, but their widespread adoption may be hindered by a lack of charging infrastructure, constraints in the supply of raw materials for batteries and more expensive charging options due to rising energy prices.

According to the International Energy Agency (IEA), the current crisis could accelerate the adoption of cleaner, sustainable, renewable energy sources such as wind and solar power, just as the oil shocks of the 1970s led to significant advances in energy efficiency and the use of nuclear, solar and wind power (IEA, 2022). Compared to the 1970s, natural gas and renewable energy sources now play a larger role in electricity generation. In terms of green energy sources, the use of nuclear energy increased by more than four percentage points. The share of other sources, including renewables such as hydro, wind and solar, also increased compared to the 1970s, but their share in global energy supply remains low compared to fossil fuels (Chart 7). In the early 1970s, nuclear and renewable energy sources accounted for 13 per cent of global energy use, while fossil energy sources accounted for 87 per cent (IEA, 2021). By 2019, the share of clean energy sources had increased to 19 per cent, but the weight of fossil energy sources is still over 80 per cent.

Chart 7: World total energy supply by source (1971-2019)



Source: IEA

While renewable energy sources may offer a long-term alternative, the trends so far suggest that their spread will be slow. The negative economic outlook and short-term decisions to meet current needs may further hinder the transition to renewables, as the current focus is primarily on replacing the missing energy sources. In addition, the shift to clean energy depends to a large extent on access to the minerals required for manufacturing solar cells, wind turbines and batteries, such as lithium, cobalt, nickel and copper.

The infrastructure needed to harness renewable energy sources has become more expensive to build recently, and there is seasonal volatility in energy production. In the autumn and winter, the extraction efficiency of renewable energy sources is much lower, making it even more challenging to cut back on fossil fuels. The slow adoption of clean energy sources and the

difficulties associated with storing green energy indicate that they are unlikely to dominate the energy mix in the near future.

The energy crises have highlighted the need for greater diversification of energy sources. Neither an exclusive reliance on fossil fuels nor on renewable energy sources is conducive to energy security, defined by the EIA as the uninterrupted availability of energy resources at affordable prices (IEA, 2023). While a complete phase-out of fossil fuels would reduce the diversification of countries' energy mixes, increased reliance on renewables could also pose new energy security risks. Countries can enhance energy security by diversifying their supply sources and energy mix in the short term and improving energy efficiency in the long term.

IX

Examining Price Controls During World War II and the 1970s

Péter Aradványi

This study describes the price and wage controls applied by the United States during World War II and the early 1970s. It can be said that, in respect of the two price-control programmes examined, only the comprehensive measures supplemented by the wartime rationing system during World War II proved effective in reducing and restraining inflation. However, despite the temporary successes, inflation started to rise rapidly after the end of both programmes, which may be attributed to both accumulated price pressures and the inadequate pace of programme completion. Data available until 15 November 2022 were used for this analysis.

First Price Regulation – 1941-1946

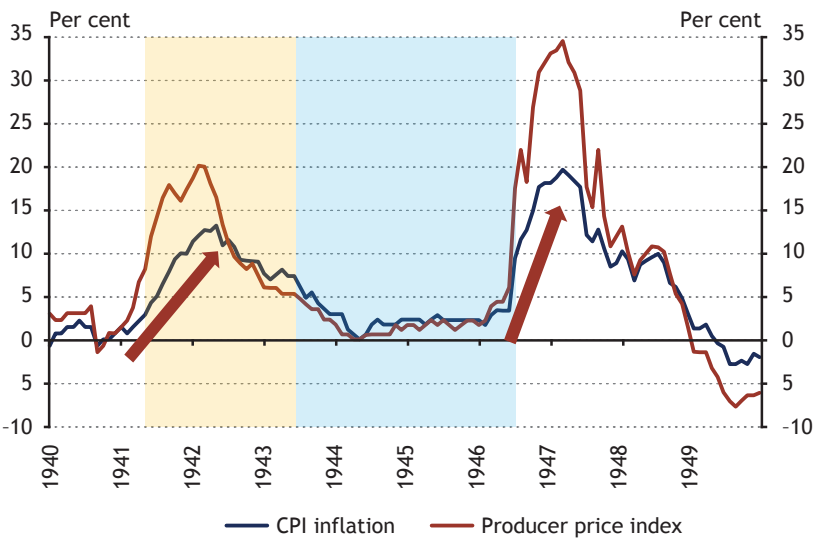
During the early 1940s, outfitting the military and higher foreign demand boosted the US economy. High federal war spending, rising employment, rising wages and falling supply due to factories converting to war production led to mounting inflation. In response, the US government implemented selective price control measures, which, however proved insufficient to curb price increases. Between January 1941 and January 1942, the producer price index rose to 18.7 per cent and the consumer price index to 12.1 per cent (Chart 1).

In January 1942, Congress passed the Emergency Price Control Act, which aimed to *'stabilise prices and to prevent speculative, unwarranted, and abnormal increases in prices and rents; to eliminate*

and prevent profiteering, hoarding, manipulation, speculation, and other disruptive practices resulting from abnormal market conditions or scarcities caused by or contributing to the national emergency...'. According to the Roosevelt administration, the only way to maintain living standards was to maintain the ratio of prices to wages, which required comprehensive regulation. The Office of Price Administration (OPA) was the federal agency responsible for the administrative implementation of price controls.

In April 1942, President Roosevelt approved a 7-point anti-inflationary plan, which aimed to prevent inflation from rising further by administrative measures (price controls, wage bargaining, etc.) and by reducing consumer demand. Under the *General Maximum Price Regulation* measure, which was part of the plan, consumer prices for most goods and services were fixed at March 1942 levels.

Chart 1: Inflation and the producer price index in the United States between 1940-1949



Note: The area in yellow indicates the period of selective price restrictions, while the area in blue indicates the period of comprehensive price and wage restrictions.

Source: US Bureau of Labor Statistics

In order to avoid shortages caused by price controls and shrinking capacities, as well as resource allocation problems, the OPA introduced a rationing system. Through the rationing system, the OPA limited the amount that could be purchased per household and promoted a more equal and fair distribution of basic goods. Following the introduction of the rationing system, every US citizen received a red and blue booklet containing tickets/points every month. Blue points could be used to buy processed food, while red points could be used to buy meat, fish and dairy products. For the products covered by the rationing system, a special price was set, consisting of a fixed price in dollars and a point value (e.g. a can of tomatoes cost 13 cents and 18 points). The point value varied in inverse proportion to the quantity of the goods available, regardless of the dollar price of the good.

Over time, the general shortage of goods led to the emergence of grey and black markets. Trading in unused tickets, ticket forgery and the black market sale of the cargo of freight trucks emerged. Some customers bought more or better-quality products than the allowed quantity. Stores often sold goods without points at prices higher than the regulated dollar price. Retailers collected unused points through informal channels so that the stock they bought in exchange could later be sold on the black market. The authorities sought to prevent illegal behaviour through strict regulation and extensive monitoring, but these measures proved ineffective. Some estimates put the size of the black market in the US at 20 per cent of the retail sector.

As the end of price controls approached, 54 US economists wrote an open letter to the government asking that price controls be phased out only gradually. The 54 economists included Paul Samuelson, Irving Fisher, Frank Knight, Simon Kuznets and Paul Sweezy. In their view, as long as supply constraints did not allow demand to be met, the only way to prevent a sharp rise in inflation

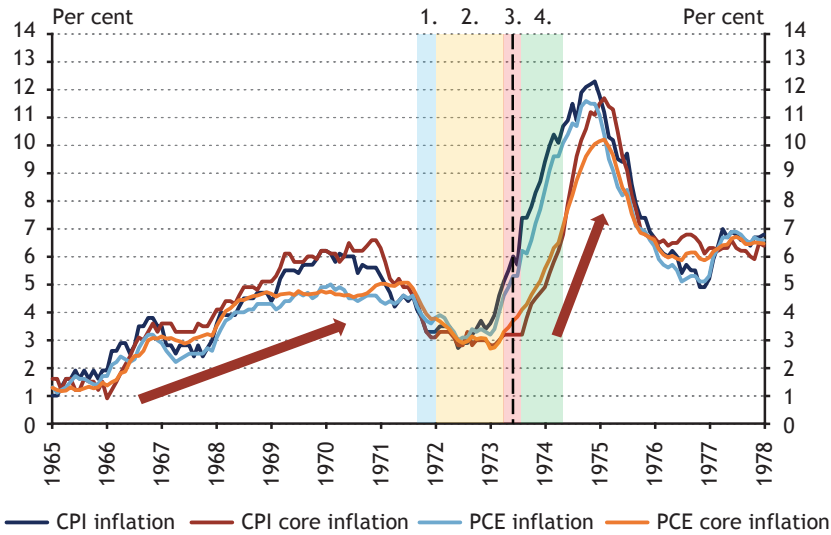
was to keep price controls in place. Their fears were confirmed and prices began to rise rapidly after the simultaneous phasing out of price controls in April 1946. Inflation rose from 2.5 per cent in early 1946 to close to 20 per cent in March 1947.

Second Price Regulation 1971-1974

The war expenditures associated with the Vietnam War led to high economic growth in the US. Between 1965 and 1970, the US economy expanded at an average annual rate of 4.75 per cent, while unemployment fell from 5 per cent to 3.5 per cent. In parallel with intense economic growth, inflation also started to increase, rising from 1.5 per cent in 1965 to 6.5 per cent in the early 1970s (Chart 2).

On 15 August 1971, President Richard Nixon, as part of a package of measures known as the 'Nixon shock', resorted to price controls for the first time in peacetime. The purpose of the measure was to stop the rise in the cost of living. President Nixon referred to inflation as the "One of the cruellest legacies of the artificial prosperity produced by war", which in his view had completely eaten up the wage increases of 1965-1969. The President promised that the temporary price and wage freeze would break the self-reinforcing cycle of rising prices and costs.

Chart 2: Inflation in the United States, 1965-1980



Note: The coloured bars mark the 4 phases of the price restrictions and the black dashed line marks the start of the 60-day exceptional price restriction period during the third phase.

Source: US Bureau of Labor Statistics, US Bureau of Economic Analysis

The programme went through four phases between August 1971 and April 1974 (Chart 2). During the most severe first phase of 90 days, prices, wages and rents were completely frozen. In the second phase, which lasted from November 1971 to January 1973, price controls were lifted and price and wage increases were kept within tight limits. Inflation halved during the first and second phases and remained close to 3 per cent until the start of the third phase.

During the third phase, which began in January 1973, mandatory price controls were replaced by a system of voluntary compliance. The change was interpreted by economic agents as a lifting of restrictions, which led to a sharp rise in inflation in early 1973. In response, President Nixon imposed another 60-day price freeze in June 1973 (except for unprocessed agricultural products

and rents), while the second-phase restrictions remained in place for wages. However, the second round of price freezes failed to stop inflation from rising.

The fourth phase of price restrictions started in August 1973. The purpose of the price regulation system, considered more effective by President Nixon, was to control the factors that caused prices to rise, to stabilise fuel and food prices and to ensure a rapid return to the free market system. Although the fourth phase was not officially completed until April 1974, the last two phases of the programme proved ineffective. Inflation rose from below 4 per cent in January 1973 to over 12 per cent in 1.5 years.

The Nixon price freeze was presumably an election campaign ploy. Audio recordings of the President's private conversations show that in July 1971, a month before the measures were introduced, Nixon was opposed to price freezes and saw them as a 'socialisation' of America. He considered the price freeze to be an ineffective measure, a 'cosmetic' adjustment of the data. However, his political allies convinced him that the move would have symbolic power, which would boost their credibility in the eyes of the American public.

Conclusions

Wage and price controls during World War II proved relatively effective in keeping inflation down and low. But this required comprehensive price and wage controls, a centrally managed war economy and a rationing system. The success of the programme is overshadowed by the fact that transactions in the burgeoning black economy are not included in official statistics, and so there is no realistic picture of actual prices. The short-lived success of the first two phases of Nixon's price controls also show that effective price controls can only be ensured through comprehensive regulation.

In both cases, the lifting of price restrictions was followed by a spike in inflation. The surge in inflation may suggest that even during the apparently low inflation period of the more successful first programme, significant price pressures accumulated in the US economy. The lesson to be drawn from this is that it is preferable to lift price restrictions gradually rather than in one step.

X

Monetary Policy Responses to Rising Inflation in the 1970s

Péter Aradványi

This study examines how central banks in the major advanced economies responded to stagflation in the 1970s. During this period, none of the central banks examined had a quantified monetary policy target variable, which made it difficult to assess the effectiveness of their anti-inflation policies. The problem was also that none of the central banks examined were independent in the current sense and that they also took other (economic) policy considerations into account in formulating their monetary policy. In the case of the two Anglo-Saxon central banks, misinterpretation of the causes of inflation and the role of monetary policy also contributed to the sharp increase in inflation. Data available until 12 January 2022 were used for this analysis.

Bundesbank

By the end of the 1960s, it was becoming increasingly clear that the Bretton Woods fixed exchange rate system was preventing the Bundesbank from achieving and maintaining price stability. The situation changed fundamentally in March 1973, when Germany switched to floating the Deutsche Mark against the US dollar. Freed from the obligation to intervene in the foreign exchange market, the Bundesbank could now focus more on achieving its price stability objective (Issing, 2005).

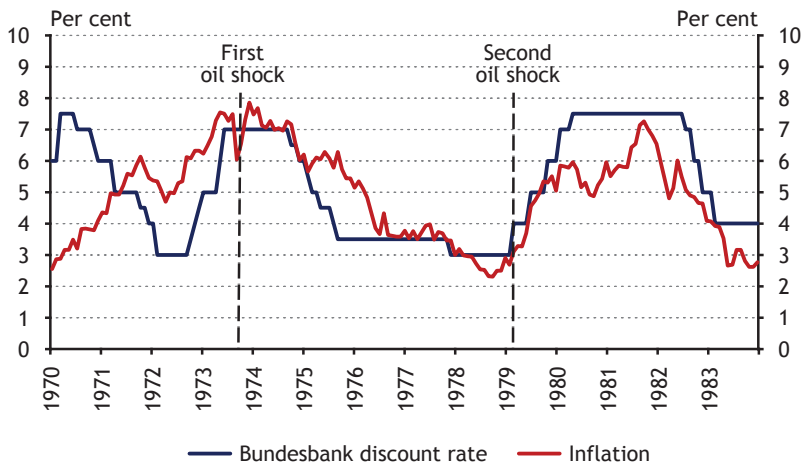
Following the first oil price shock, the Bundesbank sought to neutralise second-round inflationary effects. To this end, the central bank raised the policy rate from 3 per cent to 7 per cent in

two steps between September 1972 and June 1973 (Chart 1) and tried to keep the growth rate of the money supply low.

The problem, however, was that the German central bank did not have a credible anti-inflation strategy and did not commit to a quantified target variable. Instead, it tried to influence the behaviour of economic agents through 'moral suasion'. The strategy failed, those involved ignored the central bank's signals and implemented large nominal wage increases in 1974 to compensate for the loss of real income in 1973.

In the 1970s, the concept of introducing a quantified target for the growth rate of monetary aggregates gained widespread popularity as a result of the rise of monetarism. In 1974, the Bundesbank was the first to introduce, on an experimental basis, a framework of 'monetary targeting', whereby at the end of each year it set a target for the growth rate of the money supply for the following year. Target-setting was carried out in a highly transparent manner and was accompanied by regular communication (Nelson, 2007).

Chart 1: Inflation and the policy rate (discount rate) in the Federal Republic of Germany



Source: Deutsche Bundesbank, Trading Economics

The Bundesbank's 'pragmatic' monetary targeting framework differed from the Friedman monetary targeting rule. First, it set a target for the monetary aggregate broader than the monetary base. The monetary aggregate targeted by the Bundesbank, the so-called CBM (central bank money stock), included considerably more items than the narrow monetary base recommended by Milton Friedman. On the other hand, the Bundesbank tried to influence the growth rate of the money supply only indirectly, through short-term interest rates and the reserve requirement ratio. Moreover, the Bundesbank made it clear from the outset that it was not able to, and therefore not committed to, achieving its target precisely (Beyer et al., 2009).

Successful communication of the quantified target as a nominal anchor and the pursuit of price stability over the medium term anchored inflation expectations. Although the Bundesbank exceeded its own money supply growth target for several years, Germany was the only large advanced economy to survive the stagflation of the 1970s with an average inflation rate in the single digits (Chart 1). As inflation fell, the central bank reduced the policy rate in several steps to 3.5 per cent by September 1975 and to 3 per cent in January 1978.

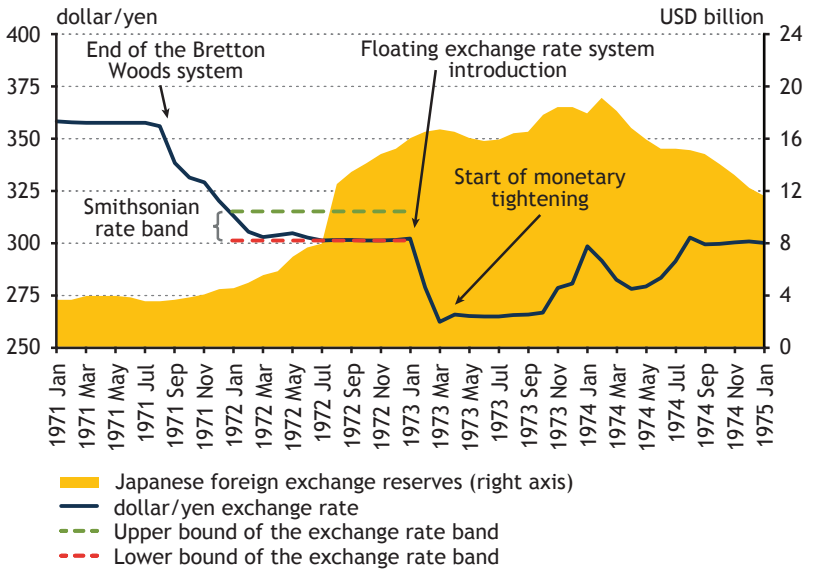
Learning from the experience of the first half of the decade, the Bundesbank started tightening monetary conditions earlier in response to the second oil price shock. The central bank raised the discount rate from 3 per cent to 7.5 per cent in five steps between February 1979 and May 1980, and also lowered the target for the growth rate of the money supply. Thanks to the tight interest rate policy, the German real interest rate remained consistently positive. Due to the sufficiently restrictive, credible central bank policy, inflation fell from a peak of 7.3 per cent to below 3 per cent in less than two years.

Bank of Japan

After the end of the Bretton Woods system, between August and December 1971, the yen strengthened against the US dollar, from 360 to 315. In December 1971, the Smithsonian Agreement was signed by the Group of Ten, in accordance with which the price of gold per ounce in USD terms was raised from USD 35 to USD 38 and the industrialised countries revalued and fixed their currencies against the dollar. The Agreement also set the equilibrium exchange rate at an even stronger level of USD/JPY 308 (±2.25 per cent), which Japanese policymakers considered overvalued.

Until the introduction of the floating exchange rate regime on 14 February 1973, the yen's exchange rate remained at the strong edge of the band defined by the Smithsonian Agreement (Chart 2). Consequently, Japanese economic policy was aimed at weakening the yen – within the band – through intervention in the foreign exchange market, lowering interest rates and stimulating domestic demand. As a result of the BoJ's interest rate cuts (from 6 per cent to 4.25 per cent in several steps) and expansionary fiscal policy, Japanese inflation had already risen above 10 per cent six months before the first oil price shock (Chart 3). Following the introduction of the floating exchange rate regime, the yen appreciated by 13.5 per cent against the dollar in a month and a half.

Chart 2: USD/JPY exchange rate and the Japanese foreign exchange reserves



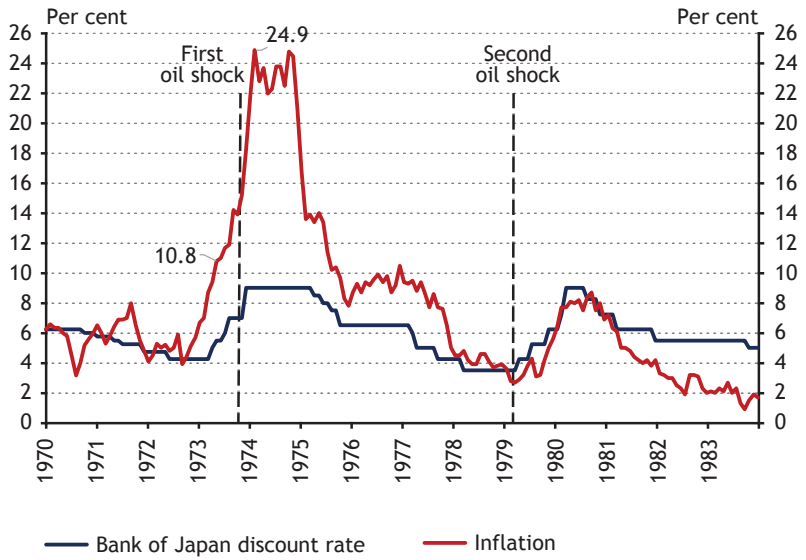
Source: Bank of Japan, Trading Economics

As a result of the oil price hike caused by the first oil shock, inflation – which had been moving sharply higher since October 1972 – surged to 24.9 per cent in February 1974. The Japanese central bank did not begin its rate-raising cycle until April 1973, when inflation was at 9.4 per cent, because of the yen's strong appreciation. The BoJ raised the policy rate in five steps to 9 per cent by December 1973 and then kept it at that level until April 1975 (Chart 3).

The insufficient tightening was due to political pressure on the Bank of Japan and a lack of institutional independence. In view of the general elections in December 1972, the Ministry of Finance 'prohibited' the central bank from changing monetary conditions. And in the post-election parliamentary budget debate period, the central bank traditionally did not change its monetary policy in order to facilitate planning (Nelson, 2007).

During the second oil shock in 1979, the Bank of Japan already started to tighten conditions before inflation had risen substantially. Learning from the mistakes of the first oil price shock, the central bank reacted appropriately to the second shock. As a result of the interest rate increases, the Japanese real interest rate did not fall into negative territory during the period 1979-1981, and the Japanese economy eventually came through the period with inflation below 10 per cent.

Chart 3: Inflation and the discount rate in Japan



Source: Bank of Japan, Trading Economics

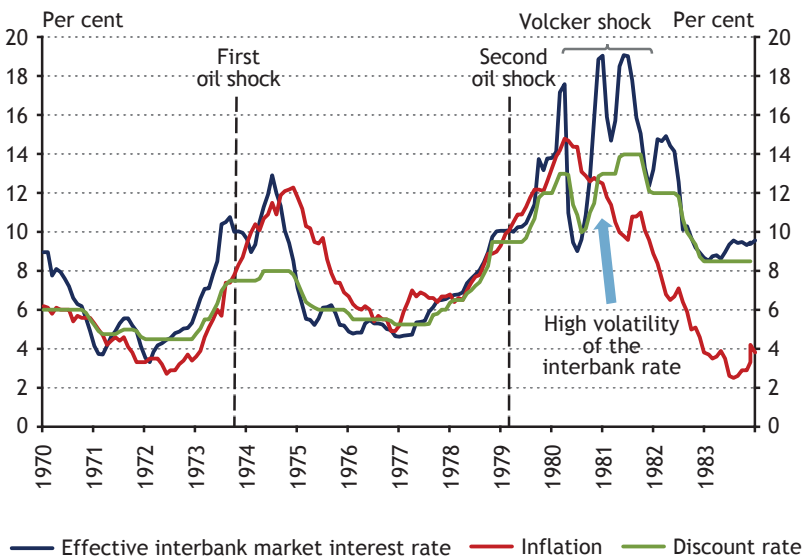
Federal Reserve

During the first oil price shock, the Federal Reserve's monetary policy response to rising inflation proved to be inadequate. Analyses of the period suggest that the monetary policy of the central bank under Arthur F. Burns contributed to the rise in inflation and inflation expectations. Although the Fed raised the

base rate to 11 per cent in 1973 and 13 per cent in 1974 (Chart 4), the rate increases were considered insufficient and too late to stop the formation of an inflationary price-wage spiral (Nelson, 2004).

The reason for the insufficient tightening was that Burns believed that the rise in inflation was caused by excessive trade union wage demands. These conclusions were drawn by the Fed Chairman from his experience during the 1970 economic downturn and subsequent weak recovery. During the recession of 1970, the rate of wage growth did not fall despite rising unemployment, thanks to excessive trade union bargaining power, and inflation remained consistently above 5 per cent. According to Burns, inflation could only be controlled by limiting wage agreements between employers and trade unions. Wage controls would entail a reduction in inflation expectations, allowing monetary policy to reduce inflation without serious losses to the real economy (Moss-Wyatt, 1997).

Chart 4: Inflation, discount rate and the effective federal funds rate in the United States



Source: FRED, Trading Economics

As the economy recovered from the crisis caused by the first oil shock, inflation started to rise again in 1977. By the time the impact of the second oil shock hit the US economy, inflation had risen from 5 per cent to 9 per cent in two years. Once again, the Fed did not tighten sufficiently, because according to the belief of William Miller, the new Chairman elected in 1978, the rise in inflation was temporary. Confidence in Miller soon faltered and President James Carter appointed Paul Volcker as Fed Chairman in August 1979 (Yardeni, 2020).

Under Volcker's leadership, the Fed moved to a monetary targeting framework in October 1979. The new regime targeted the level of non-borrowed reserves, which the Fed's policymakers at the time believed was a more efficient way of keeping inflation under control. In practice, this meant that the Fed allowed the interbank market interest rate to fluctuate much more widely than it had in the past, depending on demand for central bank money (Fed, 2003). The members of the Open Market Committee expected that the new framework would lead to greater volatility in the interbank market interest rate, and their expectation was indeed confirmed (Chart 4).

The inflation caused by the second oil price explosion could only be contained by the 'Volcker shock', named after the new Fed Chairman. Volcker's primary objective was to bring down inflation, even at the cost of lower output and a temporary rise in unemployment. In response to inflation rising to nearly 15 per cent, the Volcker-led Fed raised the discount rate to 13-14 per cent (Chart 4) and limited the amount of reserves provided to commercial banks through open market operations. Thanks to the Fed's tight monetary policy, the effective interbank market rate rose to 19 per cent on several occasions between 1980 and 1982. Thanks to extremely high interest rates, inflation had fallen to 2.5 per cent by June 1983.

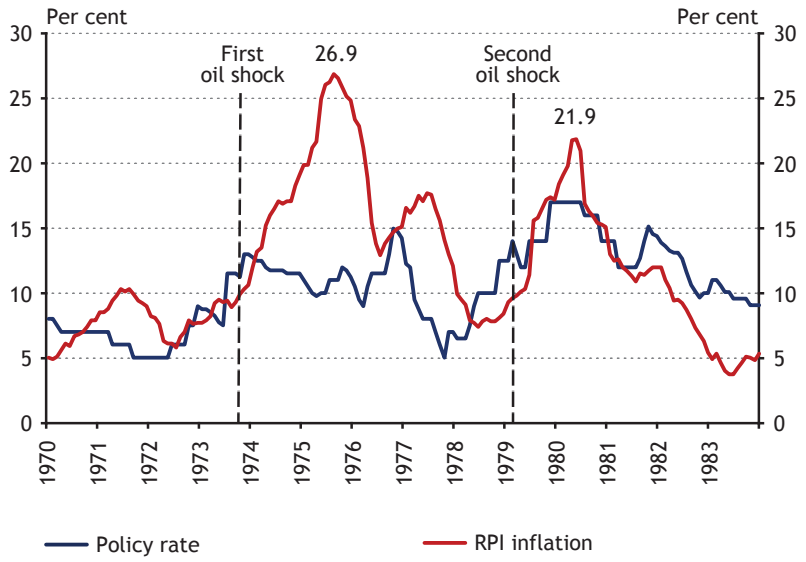
Bank of England

Among the advanced market economies, the United Kingdom saw the highest inflation rates during both the first and second oil price shocks (Chart 5). The main reason for the sharp rise in inflation was a misjudgement of the situation by economic policymakers and their advisers.

The thinking of British economic policymakers in the 1960s and 1970s was heavily influenced by a narrow group of hard-line Keynesian economists. According to these economists, monetary policy has no effect on inflation because changes in the amount of money supply are offset by fluctuations in the velocity of money (Nelson and Nikolov, 2002). In line with their views on the ineffectiveness of monetary policy, British policymakers and their advisers underestimated the impact of monetary policy on aggregate demand.

As a result, policymakers saw income, rather than monetary policy as the antidote to inflation. This conviction was further reinforced by overestimation of the effectiveness of the price and wage controls used to bring down inflation in the 1960s. Indeed, the price and wage controls introduced in 1966 were accompanied by fiscal and monetary tightening measures, but the inflation-reducing effect of the latter was also wrongly attributed to the former.

Chart 5: Inflation and the bank rate in the United Kingdom



Source: Bank of England, Office for National Statistics

As a result, economic policymakers responded to the spike in inflation during the first oil shock by regulating prices and wages. They reduced the prices of products in state-controlled sectors, cut indirect taxes, introduced food price subsidies and restricted wages. However, the price and wage controls introduced in the 1970s were not matched by sufficiently tight monetary policy this time. As a consequence, the level of real interest rates was deep in negative territory for years from 1974.

In 1973, the government instructed the central bank to reduce the annual growth rate of the M3 monetary aggregate. The central bank introduced direct quantitative controls on the M3 money supply and penalised banks whose deposits exceeded the required level. In 1976, the central bank set a formal annual growth rate for the M3 monetary aggregate, but actual monetary tightening was still lacking (Needham, 2010).

The Bank of England reacted more forcefully to the inflationary surge caused by the second oil price shock. In response to rising inflation, the Bank of England raised the policy rate to 17 per cent by December 1979 and left it at that level until mid-1980. Thanks to the more pronounced monetary tightening compared to the first oil price shock, inflation peaked 5 percentage points below the level of the first oil shock and dropped back to 5 per cent by early 1983 (Chart 5).

Conclusion

Generally speaking, credible central banks were also more successful in keeping inflation under control in the 1970s. Monetary targeting, i.e. targeting the absolute level or the growth rate of individual monetary aggregates, did not prove in itself to be an effective tool in either case. Only well-timed, sufficiently tight interest rate policy – ensuring positive real interest rates – was able to contain inflation and bring it back down to moderate levels. This is confirmed by the fact that all of the central banks examined used the experience of the first oil price shock to deal more effectively with the inflationary shock after the second oil price shock.

XI

Monetary Regime Developments and Summary of Central Bank Reactions

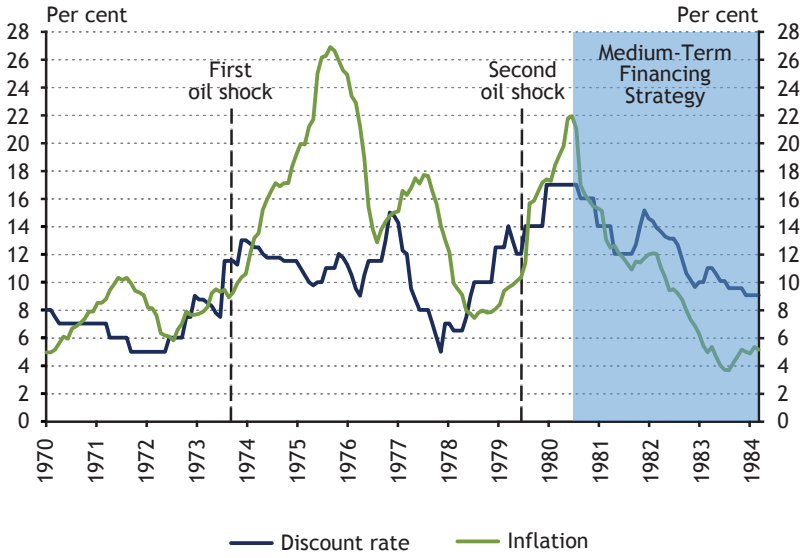
Balázs Nagy

This study describes the monetary policy responses to the high inflation environment of the 1970s, the differences in the monetary policies pursued by various central banks, and the changes in monetary strategy that characterised the period. We illustrate the role of monetary policy in economic policy at the time, and the evolution of central banks' approaches to inflationary pressures. Data available until 15 February 2023 were used for this analysis.

The Role of Central Banks in Economic Policy in the 1970s

By the end of the 1960s, inflation in the US was on the rise, mainly as a result of expansionary fiscal policy due to the Vietnam War and a decline in international confidence in the US dollar. Inflation also spread to other countries, exacerbated by the collapse of the Bretton Woods system in 1971, the outbreak of the first oil crisis in 1973 and the transition to a floating exchange rate regime. In 1970, inflation was already above 5 per cent in several OECD countries, and it continued to rise throughout the decade. In the United Kingdom, it exceeded 24 per cent in 1975 (Chart 1) and was not finally contained until 1982.

Chart 1: Inflation and the policy rate in the United Kingdom



Source: Bank of England, OECD

At the end of the 1960s, the major economies were operating under the fixed exchange rate regime of the Bretton Woods system. At that time, the main institutions of economic policy were the ministries of finance, and central banks did not have the independence that is common today. Keynesian demand management was the guiding principle of economic policy, with a toolbox designed to achieve full employment, low inflation and external balance through fine-tuning monetary and fiscal policy. Keynesian economic policy approached the treatment of inflation and unemployment based on the relationship presented by the Phillips curve, while distinguishing demand-pull and cost-push inflation. This economic policy stance faced severe difficulties in the 1970s, when high unemployment was accompanied by high inflation, which the Phillips curve relationship had difficulty dealing with.

The situation for central bankers was further complicated by diverging paradigms in relation to the origin of inflation. In addition to the Keynesian approach, monetarism, which treats the reduction of inflation as a top priority, gained more and more ground among decision-makers. According to this theory, there is a natural level of unemployment, and inflation is mainly caused by the money supply growing faster than production capacity. In a monetarist interpretation, targeting the annual growth rate of a selected monetary aggregate (at the same rate as real GDP growth) helps to achieve price stability. However, the mixing of the different theories led to mutual misunderstandings, exacerbated inflation through policy errors, especially in the Anglo-Saxon countries, and contributed to the failure of central banks to fight inflation in the 1970s.

Monetary Strategy of Certain Central Banks

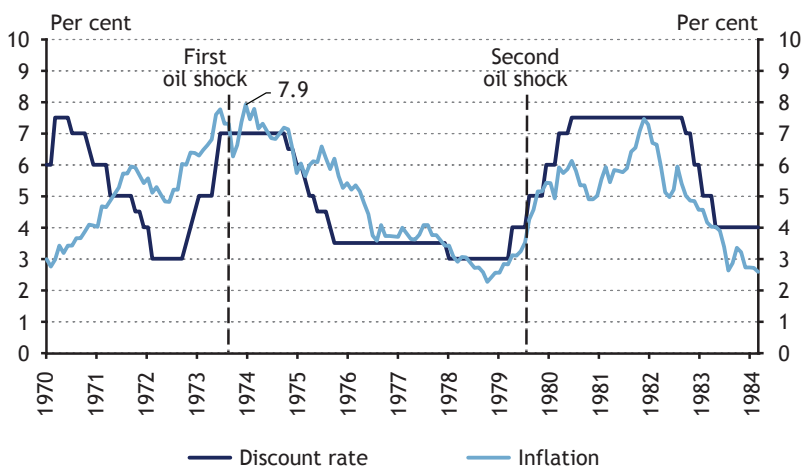
From 1966 on, the US Federal Reserve took into account the evolution of monetary aggregates when determining short-term interest rates and net free bank reserves. Monetary aggregate targeting was first used by the Fed starting from 1970 under Chairman Arthur Burns. At that time, the target level was still adjusted several times annually, depending on the financial markets, and Keynesian demand management was still applied. The target levels were not communicated publicly and transparently by the central bank. The Fed was repeatedly criticised by monetarists for not being committed enough to bringing down inflation as it eased policy in favour of unemployment rates when interest rates were high.

The Fed did not have a mandate that explicitly included price stability until the 1977 amendment of the Federal Reserve Act. The previous mandate did not provide for the possibility of

reducing inflation without severely increasing unemployment or causing a downturn in the economy, as inflation was not set as such a major target. The Fed's institutional independence was also repeatedly criticised in the 1960s and 1970s. During Arthur Burns' Fed chairmanship (1970-1978), he repeatedly helped to achieve President Nixon's economic policy goals instead of prioritising inflation, and he also tried to influence the election of members of the Open Market Committee with vetoes. Paul Volcker, before he was elected Fed Chairman in 1979, made it clear to the administration that his primary goal would be to bring down inflation, and that he would do this independently of the government.

West Germany's Bundesbank was a prominent example of a monetary targeting regime. It was one of the first central banks to introduce a monetary aggregate targeting framework in 1974, which involved the setting and transparent communication of monetary aggregate targets for the following year. As a result, Germany experienced lower inflation than the major economies during both oil crises (Chart 2).

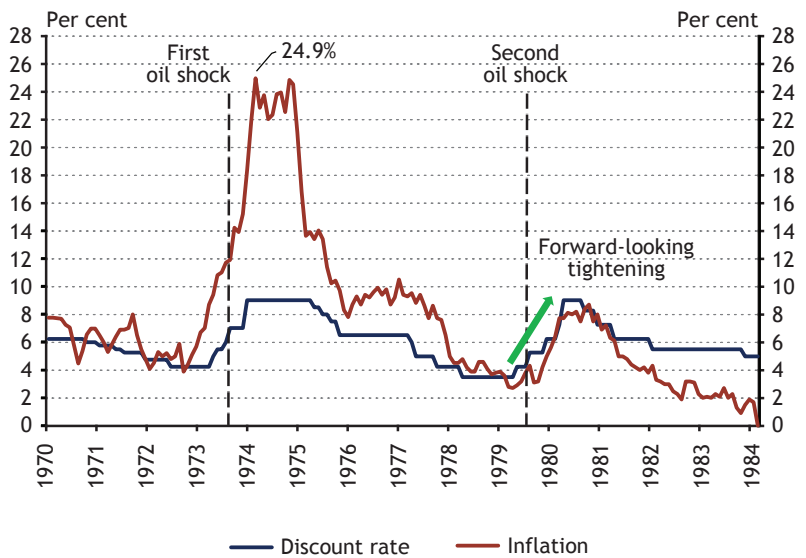
Chart 2: Inflation and the base rate in Germany in the 1970s



Source: Bundesbank, OECD

In Japan, the response to the shock caused by the first oil crisis proved unsuccessful, with inflation exceeding 20 per cent. In 1975, the Bank of Japan introduced M2 aggregate targeting, and from 1978 onwards, M2 growth expectations for the following year were also published. Additionally, the Governor of the Bank of Japan indicated that the pace of interest rate increases would be adjusted accordingly. At the time of the first oil crisis, the central bank was not yet acting according to monetarist principles, and inflation in Japan had risen to nearly 25 per cent. Thanks to the introduction of the monetarist regime, the central bank was already able to prevent the shock caused by the second oil crisis by looking ahead, with monetary tightening occurring before a significant increase in inflation (Chart 3). The interest rate hikes kept the real interest rate in positive territory in 1979-1981, allowing the Japanese economy to survive the period with inflation below 10 per cent.

Chart 3: Inflation and base rate developments in Japan in the 1970s



Source: Bank of Japan, Trading Economics

Targeting Monetary Aggregates

By the mid-1970s, inflation had risen to above 20 per cent in several OECD countries, making the alternative offered by monetarist theory more appealing. As a result, Germany formally switched to targeting monetary aggregates from 1974, followed by the USA, Canada, Switzerland and Japan from 1975, and the UK, France and Australia from 1976. To select the target aggregates, it was necessary to determine the medium to long-term growth rate and the velocity of money.

The target aggregate selected varied from country to country. In the US, the Federal Reserve targeted the M1 and M2 aggregates, the Bank of Japan targeted the M2 aggregate and the Bank of England targeted the even broader M3 and M4 aggregates. The central banks tried to achieve the target aggregate indirectly, by setting the growth rate of the monetary base (M0) as an operational target, which, according to the monetarist transmission mechanism, determines the banks' resources and lending activities through the multiplier.

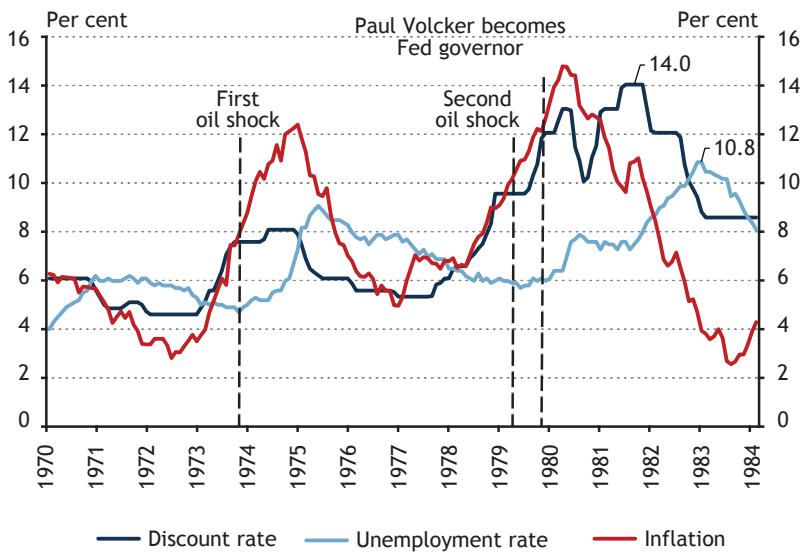
It was subsequently seen that there was only a weak link between the monetary base and bank lending activity, which was insufficient to anchor expectations. Although the central bank's monetary aggregate targeting strategy did not have a policy rate as an explicit instrument, it appears in hindsight that the interest rate level established in the monetary base adjustment became the actual instrument that could moderate inflation and through which monetary transmission was achieved. Depending on the level of interbank rates, in the US the target aggregate had to be adjusted several times, as achieving it would have led to high interest rates with serious economic consequences. Not achieving the target aggregate proved to be more favourable. Afterwards, in order to reduce the volatility of interbank rates, banks were expected to comply with the reserve requirement ratios at longer intervals and ex post, further illustrating the weak link between the monetary base and banks' lending capacity.

Targeting aggregates alone was not enough to reduce inflation. It took time for central banks and policymakers to recognise that inflation was a critical problem, even more so than unemployment and the slowdown in economic growth. This realisation came in 1979, when Paul Volcker was elected Fed Chairman and Margaret Thatcher became Prime Minister of the United Kingdom.

A More Aggressive Anti-inflation Strategy was Needed

The declared main objective of the Fed under Chairman Volcker was to bring down inflation. Under his leadership, the discount rate was raised to 14 per cent through the adjustment of monetary aggregates, resulting in unemployment above 10 per cent. This strategy plunged the economy into a recession and was widely unpopular, but it did successfully reduce inflation by 1982 (Chart 4).

Chart 4: Inflation, the discount rate and the unemployment rate in the USA in the 1970s



Source: FRED

After Margaret Thatcher became Prime Minister in 1979, the primary economic policy objective of the UK government was to tackle inflation. This was to be achieved by strengthening the supply side. Fiscal policy addressed this by shifting from income taxes to sales-type taxation and reducing public sector spending. In 1980, the government launched its medium-term financing strategy, which included targeting a declining M3 monetary aggregate for the next four years. The government was able to influence the M3 rate through the declining path of the budget deficit as a share of GDP and the level of taxation. The example of the United Kingdom is unique in a sense that aggregate targeting was primarily carried out by the government. Thatcher was distrustful of the central bank governor, Gordon Richardson, as she was under the impression he had sabotaged the government's monetary aggregate targeting strategy. As a consequence, although monetary policy continued to be conducted by the central bank, the influence of the central bank governor in decision-making was weakened. The policy rate was set by the central bank in line with the government's M3 aggregate target, and by 1980 the level of interest rates had exceeded 16 per cent (Chart 1). The result of the monetarist experiment was high unemployment, declining economic growth and a decline in inflation to 5 per cent by 1983.

Inflation Targeting and Central Bank Independence

After tackling the Great Inflation, the credibility of central banks increased significantly, laying the foundations to the introduction of central bank independence in the late 1980s. The rationale for central bank independence is to avoid a potential conflict of objectives between the central bank's economic policy targeting price stability and the policies of other key economic

policy actors. In addition, the independence of central banks was accompanied by a demand for transparency and accountability towards central banks.

The Reserve Bank of New Zealand was given a legal mandate to maintain price stability in 1989. It was enshrined in law that the central bank was free to conduct monetary policy in order to achieve the objective of price stability. This was the start of an international trend among developed countries, which led to the legal guarantee of central bank independence in more than 28 countries between 1989 and 1999 (the Bundesbank was an exception, having been independent since the end of World War II). The new mandate created the legal and institutional framework for implementing the inflation targeting strategy.

In the 1980s, the targeting of monetary aggregates gradually declined as the rate of money flows became less predictable. This was partly due to the emergence of derivatives and developments in information and communication technologies. In addition, efforts to suppress inflation led to international recession and high unemployment in the early 1980s, which led to a poor public perception of monetary aggregate targeting. Meanwhile, practice also disproved one of the theoretical pillars of monetarism, the money multiplier principle, according to which the evolution of the monetary base had a direct impact on banks' lending. According to the new theory, lending activity is driven primarily by capital requirements, banks' profitability and risk appetite, and demand for credit.

With the decline of monetary aggregate targeting regimes, inflation targeting regimes became increasingly popular, setting a direct inflation target instead of monetary aggregates that have an indirect impact on inflation. The central bank, which uses an inflation targeting regime, sets a medium-term inflation

target, which is also intended to reduce inflation by anchoring expectations. Central bank accountability is an important element of inflation targeting, as a central bank with an explicit, quantified target is easier to hold accountable on the basis of its performance. In the 1990s, the inflation targeting regime became widespread, and it was accepted that the primary instrument of monetary policy was to influence short-term interest rates. For the first time, the Reserve Bank of New Zealand introduced an inflation targeting regime in 1990 by setting a target range for the annual path of inflation. The Bank of Canada was the second to introduce inflation targeting in 1991, followed by the Bank of England in 1992 with a target range of 1-4 per cent. The two most important central banks, the ECB and the Fed, did not introduce explicit inflation targeting regimes in the 1990s. For the ECB, the evolution of the monetary aggregate M3 was initially monitored alongside inflation. The Fed did not set an explicit inflation target, but under the leadership of then Fed Chairman Alan Greenspan, the Fed responded to rising inflation by setting a higher policy rate, which in hindsight could also be interpreted as an implicit inflation targeting.

XII

The Role of Fiscal and Monetary Policies in Periods of High Inflation

Balázs Nagy – Balázs Spéder

This study reviews the interaction between fiscal and monetary policy in the 1970s. We examine the impact of effective monetary and fiscal policy coordination and the impact of the lack of such. Past experiences suggest that the consistency of monetary and fiscal policy, and a common economic policy can significantly help to reduce inflation. Data available until 12 July 2023 were used for this analysis.

Economic Policy in the 1970s

The oil crises of the 1970s and the collapse of the Bretton Woods system generated significant inflationary pressures worldwide. The economic policy response to the inflationary shock was initially slow, as the combination of high unemployment and high inflation could not be adequately addressed by the dominant economic models of that time. Keynesian demand management sought to achieve full employment, low inflation and external balance through fine-tuning monetary and fiscal policy. At that time, central banks did not have the independence we know today, and the primary economic policy actors were finance ministries.

The period of rising inflation was finally put to an end by large increases in central bank interest rates in the first half of the 1980s. As a result of tight monetary policy, inflation was curbed mainly by central banks, which increased their prestige. This helped to establish the independence of central banks on a broad

basis by the late 1980s. Arguments in favour of independence included the successful reduction of inflation in the 1970s and the avoidance of potential conflicts of interest with the government. But fiscal policy, alongside monetary policy, also played an important role in determining which countries were more successful in tackling high inflation.

Theory of Coordination between Fiscal and Monetary Policies

The relationship between monetary and fiscal policy plays an important role in the optimal functioning of economic policy. Eric Leeper[2] theorises that in economic policy, fiscal and monetary dominance can be distinguished. He defines active and passive roles for monetary and fiscal policy. In the case of monetary policy, active is defined as a tightening monetary policy, while passive is defined as a looser monetary policy that allows deviations from the inflation target. In terms of fiscal policy, fiscal expansion is considered active, while the pursuit of long-term balance and a minimum government deficit is considered passive. In fiscal dominance, active fiscal policy is accompanied by passive monetary policy, while in monetary dominance, active monetary policy is accompanied by passive fiscal policy.

Leeper considered monetary dominance to be the optimal case, in which the central bank pursues its inflation target and the budget remains passive, so that no significant budget deficit is incurred and inflation remains moderate. In the case of fiscal dominance, active fiscal policy creates a large primary budget deficit, while passive monetary policy allows for the development

[2] Eric Leeper is an economist specialising in monetary and fiscal policy analysis. He previously worked at the Fed for 8 years, and is currently Head of Department at Indiana University, external advisor to the Swedish central bank and researcher at the NBER.

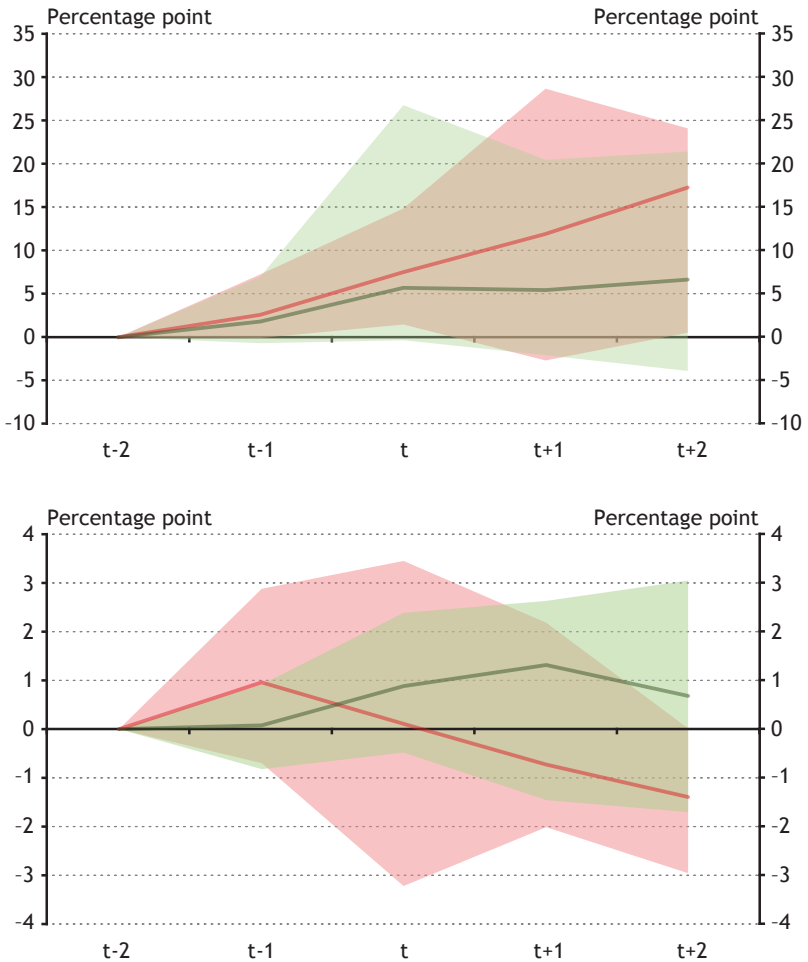
of higher inflation, which can inflate away the accumulated public debt. Active-active or passive-passive combinations are possible, but according to Leeper's model, these combinations do not lead to an equilibrium state and therefore have negative effects on the economy. However, it is also worth noting that Leeper's model is based on the principles of the new neoclassical synthesis and is rather simplistic in terms of debt inflation in the context of today's financial realities and investment-saving opportunities.

The Role of Fiscal and Monetary Policies in Managing High Inflation

Analysis elevated inflation periods in the past 50 years suggests that fiscal policy, alongside with monetary policy, can play a significant role in successfully managing inflation shocks. During the period since 1970, 204 periods of high inflation can be identified across the 193 countries surveyed. A period of high inflation is defined as a period when inflation has risen from a relatively low level to above 20 per cent in a short period of time. The group of countries that were successful in managing inflation managed to keep inflation below 10 per cent for a sustained period of 1 year after the shock, while the group of countries that were unsuccessful had inflation above 20 per cent throughout the second year after the shock. As regards the management of elevated inflation, several fiscal characteristics can be identified among countries that have successfully or unsuccessfully managed inflation. For example, in terms of public debt-to-GDP, the indicator rose by a similar total of 5-7 percentage points in the two years before the surge in inflation for both successful and unsuccessful countries, but later stopped rising for successful countries, while for unsuccessful countries the median value of the increase was over 17 percentage points two years later (Chart 1). The budget balance remained relatively stable in the countries

that were more successful in managing rising inflation, while the government deficit increased significantly in the unsuccessful countries (Chart 2).

Charts 1 and 2: Percentage point change in government debt-to-GDP (top panel) and the budget balance (bottom panel) in successful and unsuccessful disinflation episodes compared to the second year before the surge in inflation

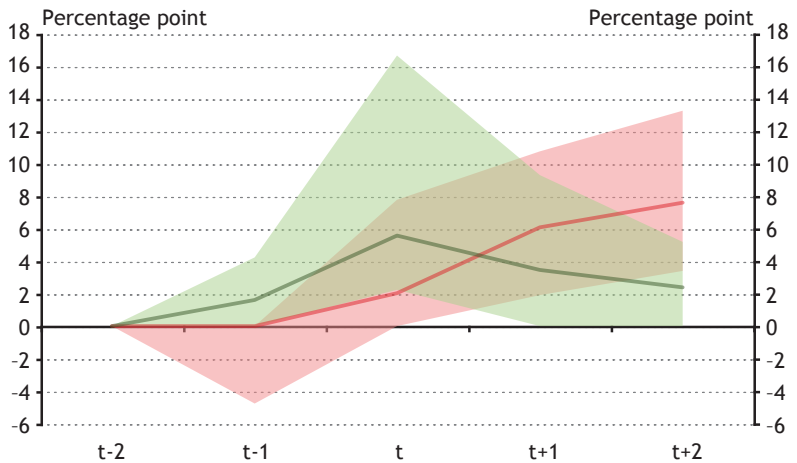


Note: The banded coverage is between the 25 and 75 percentiles. The solid line is the 50th percentile (median). Green: successful, red: unsuccessful cases.

Source: World Bank, IMF

The central banks that were more successful at suppressing inflation raised interest rates faster and more substantially, which later allowed them to cut rates earlier as inflation fell. Short-term interest rates, which signal a monetary policy response, rose both in countries that successfully managed and those that failed to manage inflation. However, in the group of countries that managed inflation successfully, interest rates rose more sharply in the year before high inflation and fell in the disinflation phase (Chart 3). By contrast, short-term interest rates in the failing countries continued to rise over the next two years. The period of rising inflation in the 1970s was managed more successfully by the United States, Germany, Japan, Canada and Austria, among others. For these countries, real interest rates fell less and for shorter periods into negative territory, while for the unsuccessful countries they were more persistent and significantly negative.

Chart 3: Percentage point change in short-term interest rates in successful and unsuccessful episodes

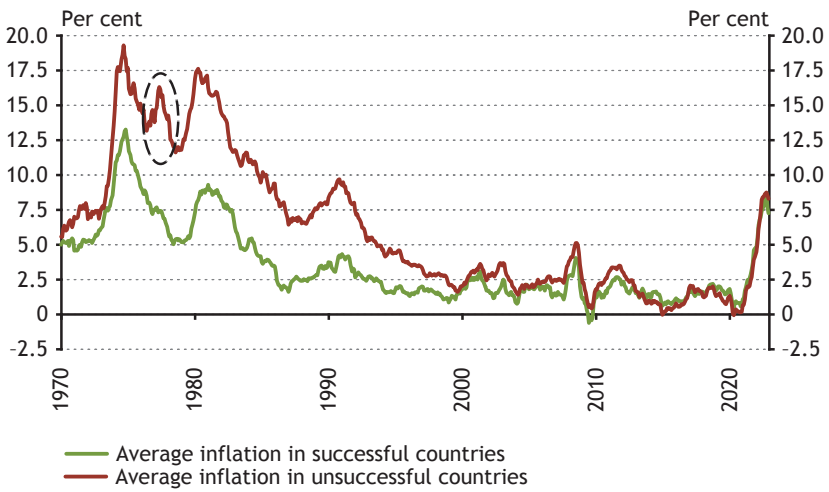


Note: The banded coverage is between the 25 and 75 percentiles. The solid line is the 50th percentile (median).

Source: World Bank, IMF

Countries that failed to manage inflation typically experienced a third inflation shock between the two oil shocks (Chart 4). One common feature of these countries, in addition to negative real interest rates, is that they had persistently negative fiscal balances, coupled with current account balance deficits, contributing to rising levels of public debt.

Chart 4: Inflation trends in countries classified as successful or unsuccessful in managing inflation



Source: OECD, Bloomberg

Conclusion

As in the 1970s, and other periods of high inflation in the past, the consistency of monetary and fiscal policy is an important element of economic policy today as well. As historical examples show, a rapid response to rising inflation, real interest rates remaining positive and a moderate government deficit also play a role in achieving disinflation. An appropriate monetary policy response is therefore a necessary but not sufficient condition for a successful fight against inflation, as it also requires a disciplined fiscal policy.

XIII

Demography, Labour Market and Trade Unions in the United States in the 1970s and Today

Bernát Lakatos

This study looks at the demographic, labour market and trade union factors in the 1970s and the current period. The US macroeconomic environment in the 1970s and in the current period differ significantly in terms of key demographic, labour market and trade union aspects. Comparing the different periods, the share of the working-age population increased dynamically in the 1970s, while the trend has been moving downwards since the 2000s. A similar trend can be observed in the labour market participation of women. Compared to the 1970s, today's labour market is tighter, but nominal wage growth in the 1970s exceeded inflation for most of the decade, while today it lags behind in most countries. In our analysis, we examine the explanatory factors behind the paradox. We focus on US trends because of the detailed availability of data and the country's dominant role in economic developments. Data available until 23 January 2023 were used for this analysis.

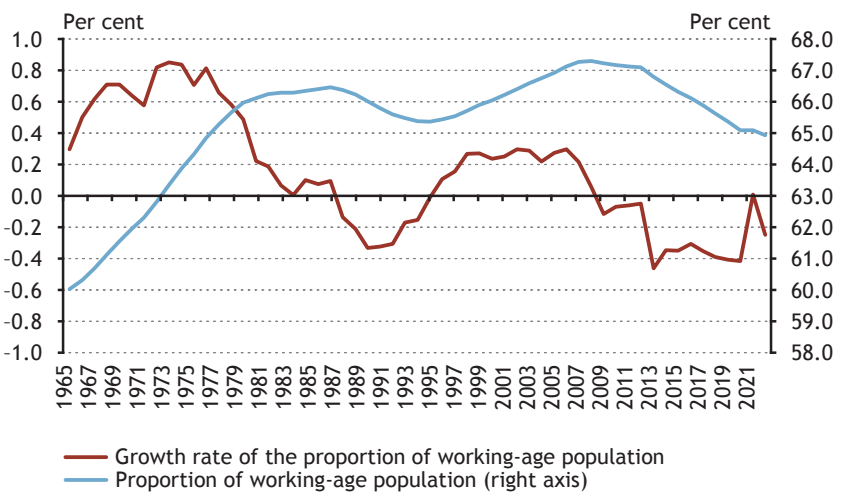
Demographic Trends

Demographic trends are an important explanatory factor for inflation. In our analysis, we present changes in the share of working-age population and the female labour market participation rate in the United States, including changes in the institutional and technological background of the labour market between the two periods.

In the United States, the share of the working-age population (15-64 year olds) in the total population increased significantly from the 1960s until the first half of the 1970s, thanks to the baby boom generation entering the workforce. The growth rate peaked at 0.9 per cent in 1973, the year of the first oil price shock, and the proportion of people of working age rose to 63 per cent. However, growth began to slow from the second half of the decade, falling to 0.1 per cent in 1979, although the proportion of the working-age population still continued to rise, reaching 66 per cent.

From 2007 to the present, the opposite of the trend prevailing until the first half of the 1970s has been observed. In the US, the retirement of the baby boom generation became widespread over the last 15 years. As a result, the annual change in the working-age population fell from -0.1 per cent in the early 2010s to -0.3 per cent today, with the share of the working-age population falling from 67 per cent to 65 per cent.

Chart 1: Changes in the proportion of working-age population in the US

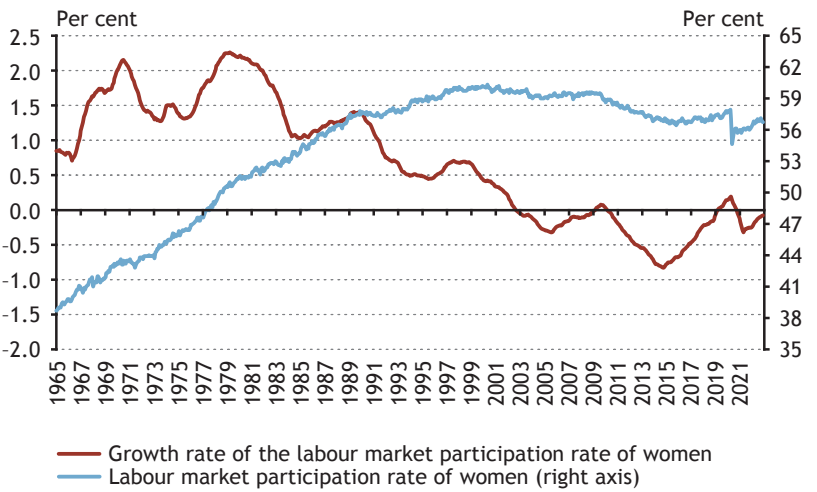


Source: OECD

An increase in the labour market participation rate of women was observed after the end of World War II, which began to accelerate from the mid-1960s. The growth rate rose from around 1 per cent in 1965 to over 2 per cent in 1970, resulting in an increase in the participation rate of women in the labour market from 39 per cent to 43 per cent (Chart 2). This dynamic growth slowed in the first half of the decade, but by 1976 it had risen again to near 2 per cent, reaching a participation rate of 47 per cent.

In the past decades, the growth in female employment rates slowed down and then started to decline in the early 2010s. Women's labour market participation rates have fallen from a peak of 60 per cent in the second half of the 1990s to a still relatively high 57 per cent. With the outbreak of the Covid-19 pandemic in 2020, the participation rate temporarily fell sharply, but has since corrected to the 57 per cent level.

Chart 2: Changes in female labour force participation rates in the US[3]



Source: FRED

[3] Due to the high volatility of annual growth, the five-year moving average is shown.

Theories on the Relationship between Demography and Inflation

There is currently no consensus in the scientific literature on the impact of demographic trends on inflation. Some studies have found evidence of a positive relationship, while other studies have found evidence of a negative one. Three different theories are presented below, based on which authors estimated the impact of demographic variables on inflation: 1) the theory of real interest rates, 2) the life-cycle theory, and 3) the theory of intergenerational wealth distribution.

- **Bobeica et al. (2017) found evidence of a positive relationship between changes in the growth rate of the working-age population and inflation.** They argue that this may be because, as the proportion of people of working age declines, capital becomes more abundant relative to labour, which negatively affects the marginal product of capital and leads to a low equilibrium real interest rate. As a consequence, adverse macroeconomic shocks are more likely to require negative real interest rates. And if the economy is already in an environment of low inflation and at the effective lower bound, this can greatly reduce the effectiveness of monetary policy, leading to excessively tight monetary policy and low inflation.

- **According to the life-cycle theory, members of society consider their life-cycles when they plan their consumption and savings, in order to smooth their consumption levels over their lifetime.** Thus, when certain age groups become the majority in society, aggregate supply and demand shifts. Based on this theory, Juselius and Takáts (2018), among others, find evidence that an increase in the dependency ratio can lead to higher inflation. As the dependency ratio rises, the savings rate falls, and the gap between aggregate supply and demand is

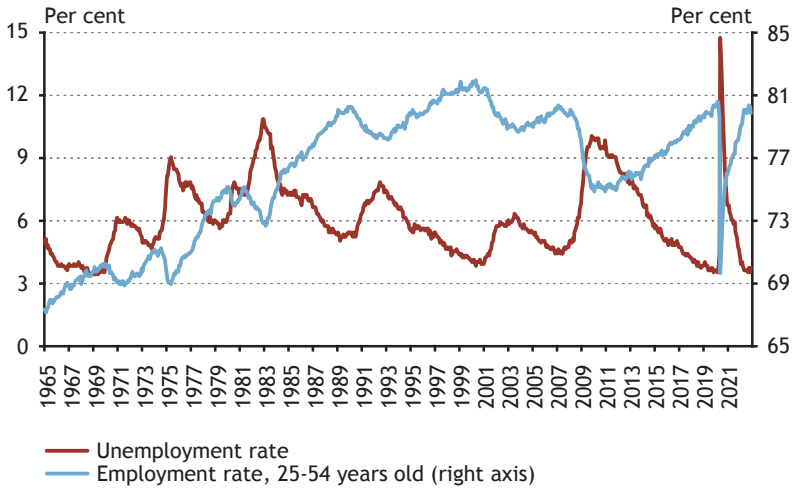
filled by rising inflation. Falling labour supply also puts upward pressure on wages, leading to a further rise in inflation.

- **Finally, based on the third theory presented here, Bullard, Garriga and Waller (2012), among others, argue that the level of inflation depends on the dynamics of the intergenerational distribution of wealth**. If the working-age generation is in the majority, inflation will be higher, as it redistributes wealth from the older generation – whose accumulated wealth is reduced by inflation – to the working-age generation. And if the older generation is in the majority, inflation will be lower because of their wealth distribution preferences.

Labour Market and Trade Unions

The current US labour market is considerably tighter than the 1970s' labour market. Compared to the US unemployment rate of 3.7 per cent in October 2022, the unemployment rate was 3.9 per cent in 1970 before the oil price shocks, and reached 9 per cent in 1975. Even by the end of the decade, the indicator had fallen back to only around a 6 per cent level (Chart 3). Similarly, the employment rate for 25-54 year olds fell from around 80 per cent in 1970 to 68.9 per cent in 1975, before rising to 75 per cent by the end of the decade. Based on available labour market indicators, the US labour market today has much less unutilised working capacity, making the labour market much tighter than it was in the 1970s.

Chart 3: Unemployment rate and employment rate of 25-54 year olds in the US



Source: FRED

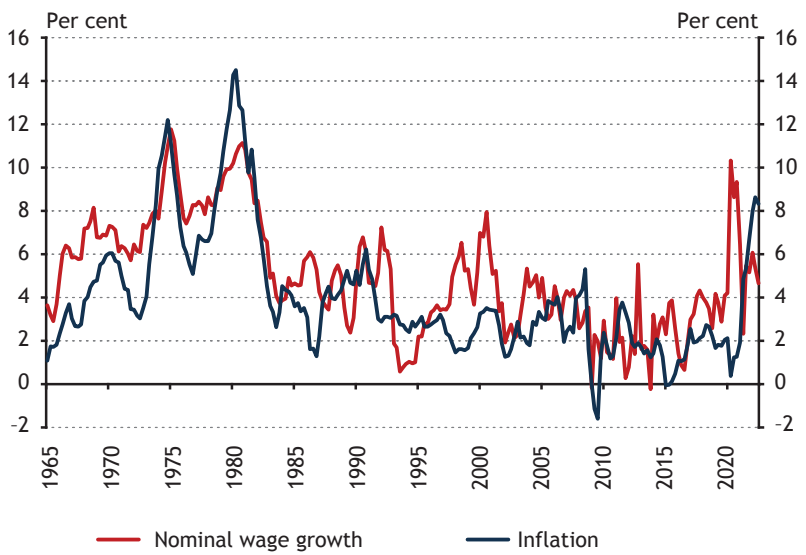
This is relevant because of the tightness of the labour market, and its potential impact on inflation through wage dynamics and the emergence of a price-wage spiral. The 1970s were characterised by the price-wage spiral, with upward pressure from the increases in wages and prices on each other, but nowadays its development is still in question.

In the 1970s, nominal wage growth and inflation followed similar paths, with nominal wage growth exceeding inflation except in the immediate post-oil shock periods, so that real wages rose for most of the decade (Charts 4 and 5).

By contrast, today nominal wage growth is well below inflation, and thus real wages have fallen significantly in the period since the onset of the Covid-19 crisis. However, this decline can also be seen as a correction of the significant real wage increase due to low inflation and high nominal wage increases following the outbreak of the Covid-19 pandemic.

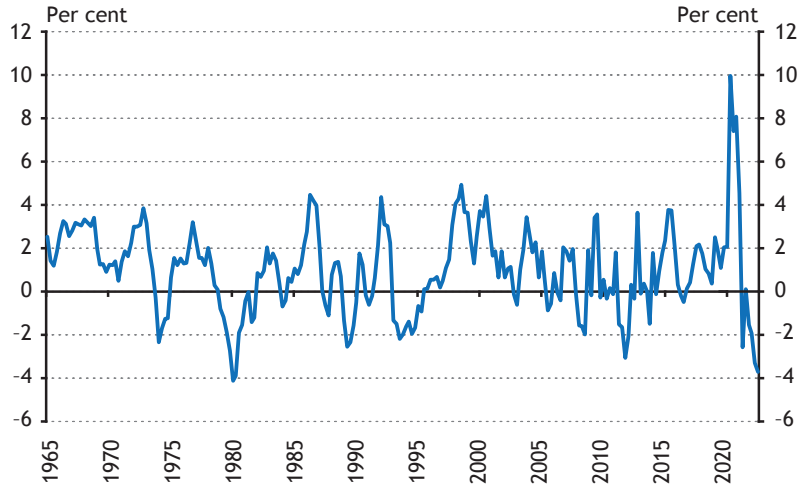
The IMF study comparing past periods of high inflation suggests that if, as in the current period, a high inflation environment is not accompanied by real wage growth, a price-wage spiral is not expected. The primary reason for this is that falling (or stagnating) real wages are alleviating upward price pressures both through firms' costs and through consumers' demand. For firms, the fall in real wages reduces the marginal cost of labour, thereby lowering the producer price of firms. And for consumers, the decline in real wages reduces purchasing power, which restrains aggregate demand.

Chart 4: Nominal wage growth and inflation in the US



Source: FRED

Chart 5: Real wage growth in the US



Source: US Bureau of Labor Statistics

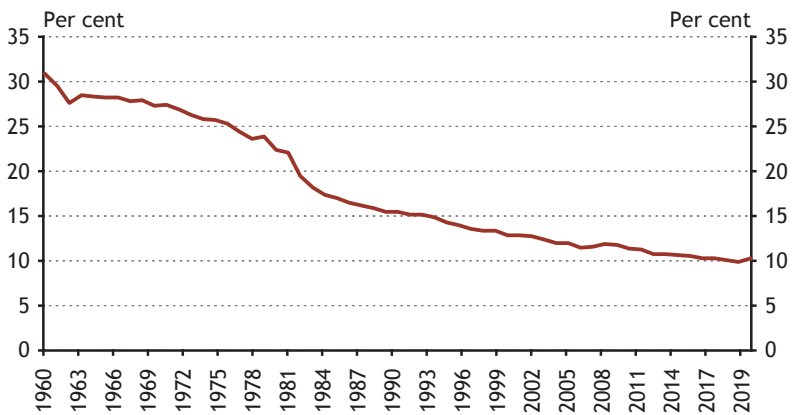
However, unlike in the 1970s, the current period could see the emergence of a price-profit spiral, rather than a price-wage spiral. The Economic Policy Institute calculated that the contribution of non-financial corporate profits to inflation increased from 11.4 per cent before the pandemic to 53.9 per cent in the period from the second quarter of 2020 to the end of 2021, whereas the contribution of companies' labour costs fell from 61.8 per cent to 7.9 per cent over the same period. This significant change is probably due to the fact that firms, in an environment of increased demand and tight labour markets, are using price increases to maintain, or often increase, their margins, rather than keeping wages low.

The lack of real wage growth in the current period is probably due to the rise of globalisation and automation, the weakening of trade unions and the rapid growth of the 'gig economy', characterised by project-based employment contracts. Since the 1970s, as a result of increasing globalisation, workers in advanced

economies, especially those with lower skills, have lost bargaining power vis-à-vis their employers as they have to compete with lower-paid workers from emerging economies. Furthermore, the increasing automation in past decades has led to wage growth, which has easily resulted in the substitution of labour. As a consequence, workers' bargaining power is weakened and they are less able to negotiate higher wages.

The weakening of trade unions has led, among other things, to a decline in the number of collective wage agreements. In the United States, the proportion of trade union members compared to the total workforce has declined significantly since the 1970s (Chart 6). This process started already in the 1960s. Between 1970 and 1979, the proportion of trade union members fell from 27 per cent to 22 per cent. In the 1970s, employer opposition to trade unions grew. There was an increase in the number of dismissals of trade union activists, the demand for consultants to advise against trade unions and the number of court decisions that ruled out action against certain employer decisions (such as outsourcing and some factory closures). The weakening of trade unions continued after the 1970s, with membership falling to 10 per cent by 2020.

Chart 6: Trade union membership as a share of employees in the US



Source: OECD

In recent years, the US has witnessed the rise of the 'gig economy', i.e. an economy characterised by project-based employment contracts. 35 per cent of the US workforce was working in a first or second job under a project-based contract (typically through a digital app) in 2021. The vast majority of these workers are self-employed rather than employees, which means that they are not covered by collective bargaining and minimum wage rules. As a result, in 2020, 29 per cent of people working on project-based contracts earned less than the national minimum wage applicable to them.

However, the trends of 'quiet quitting' and 'quick quitting' since the Covid-19 pandemic may contribute to accelerating wage growth. 'Quiet quitting' refers to the labour market process where workers perform the minimum specified in their employment contract ('acting your wage'). So employers may have to offer higher wages to motivate workers. And 'quick quitting' refers to the increased rate of rapid job changes in recent years. One of the drivers of this trend is the demand for higher wages by workers, exacerbated by high inflation and a tight labour market.

Conclusion

Overall, today's US labour market is shaped by substantially opposite trends. Automation and the lack of trade unions are clearly slowing down wage inflation. Project-based work through platforms makes work cheaper in the absence of a collective agreement, but at the same time it takes a significant working-age population out of traditional full-time employment. For this reason, the impact on wage inflation is not clear. Finally, tight labour markets and a shortage of properly skilled workers have led to new labour market trends in the US, such as quiet quitting and quick quitting, which are clearly driving wage inflation. **As there is not enough spare working-age labour available to fill vacancies, the overall labour market trend is also expected to change in the 2020s.**

XIV

Development Patterns of Successful Asian Economies in the 1970s

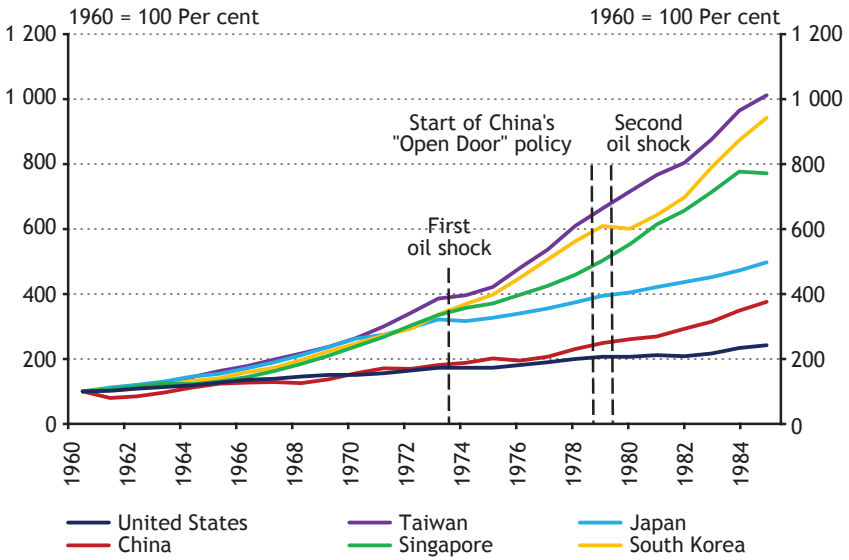
Zoltán Simon

This study describes the development patterns of successful Asian countries in the 1970s and the background to their growth. In the region, the developmental state model and export-oriented growth, which spread through Japan and led to surging growth for the 'little Asian tigers' and China, played an important role. Data available until 1 December 2022 were used for this analysis.

Motivation: Successful Adaptation by the 'Little Tigers'

The double price shocks in energy and raw materials in the 1970s shocked both developed and emerging economies through deteriorating terms of trade and temporary deficits. The rapidly industrialising countries of South-East Asia, especially Japan, and with some lag the 'little Asian tigers' (Malaysia, Thailand, South Korea, Taiwan, Hong Kong and Singapore), successfully adapted to the circumstances, following their own growth path. Japanese production and logistical methods found followers (toyotism, just-in-time), and the very low unemployment rate in this group of countries was also unprecedented globally.

Chart 1: Cumulative real economic growth in the Asian countries studied and the United States since 1960



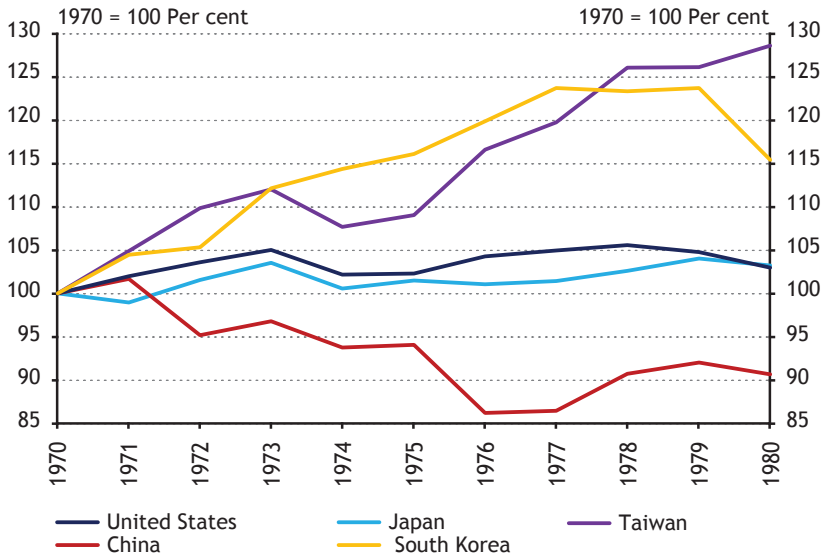
Source: Fred, World Bank

The success of the developmental state in these countries led to unprecedented economic growth, while productivity in most countries also rose in the 1970s. Annual real GDP growth above 10 per cent was also typical in the individual countries. In Japan, due to its level of development, between 1970 and 1979, the growth rate was already slower, averaging 5.3 per cent on an annual basis, while the improvement in productivity also lagged behind that of the 'little Asian tigers'. During the period, productivity rose by around 5 per cent, almost on a par with the United States.

In this period, Taiwan achieved the highest annual average economic growth of 9.7 per cent, followed by South Korea with a rate of 9.5 per cent (Chart 1). In terms of productivity, Taiwan improved by almost 30 per cent and South Korea by almost 20 per cent during the period (Chart 2). Singapore's average annual economic growth rate between 1970 and 1979 was 8.6 per cent. In

China, economic growth lagged behind the growth rate registered during the later 'Great Leap Forward': average annual real GDP growth amounted to 6.2 per cent in the 1970s, and productivity also weakened in this period.

Chart 2: Productivity growth in the countries under review and the United States



**Note: The Chart shows the evolution of the TFP (Total Factor Productivity) indicator. No data are available for Singapore.*

Source: Fred, BLS

The Developmental State Model and its Spread

In the 1970s, the *developmental state model* played an important role in the economic progress of Asia. This approach involves a state-driven economy characterised by market mechanisms, but with extensive and active state intervention to promote and manage development. The concept of the classical developmental state was described by Chalmers Johnson in 1982 to distinguish

Japan's developmental pattern from the capitalist model of the United States and Soviet planned economy.

Taking Japan's development trajectory as an example, the concept of the developmental state spread to the region in the 1970s, leading to the rise of the Asian 'little tigers'. Export-oriented economic policies were at the core of rapid economic growth, while public medium- and long-term plans, high value-added industries and the continuous development of the labour force also played an important role in economic development.

Japan: a Decade of Economic Rationalisation

Japan's earlier rapid growth began to slow in the early 1970s. This was due to a number of global and internal causes. As regard of external factors, slowing global growth and the oil crises played an important role. In terms of internal factors, it was decisive that the country's level of development caught up with the large developed economies, necessitating a shift to a lower rate of growth based on domestic technology.

From the early 1970s, inflation soared in Japan. Inflation had already accelerated in the early 1970s, well before the first oil crisis, partly as a result of expansionary growth and monetary policy measures. The Bank of Japan launched a number of credit stimulus programmes during this period, and fiscal policy was expansionary, with several large-scale infrastructure investments announced in 1971 *('Japan's Reconstruction Plan')*.

After the first oil crisis and the period of 'high prices', economic policy became tighter. As part of the structural reforms, the government reduced public energy consumption and imposed rationalisation of consumption in energy-intensive industries.

By the end of the decade, Japan had brought down inflation and made energy supply efficient, while also reducing public investment. On the monetary side, previous excessively loose conditions were also tightened, amid criticism of the Bank of Japan's past actions, which the public believed caused inflation to surge at the start of the decade.

Taiwan: Flexibility in Industrial Development

Taiwan's industrialisation began in the late 1960s and was followed by rapid economic growth. Economic policy provided significant support for the development of companies and industries that produced mainly for export. Under the export incentive scheme, special 'export zones' were created where subsidies were extended to companies that produced goods not sold domestically.

Taiwan's economy was hit hard by the 1973 oil crisis and the deterioration of diplomatic relations with the US. To remedy this, the central government launched ten major infrastructure programmes, focusing mainly on heavy industry, including petrochemicals and steel production.

Exports from light industry and emerging heavy industry grew steadily over this period. Despite this, many other emerging Asian countries with cheaper labour undermined the country's previous market advantage in labour-intensive manufacturing.

Recognising the slowing momentum in the labour-intensive, heavy-industry export-oriented model, the government shifted economic policy towards technology development. Economic policy provided substantial support for innovative industrial policy and research and development. The result of this brought success to Taiwan in the 1980s.

Unlike other neighbouring countries, Taiwan kept many key industries in state ownership. The corporate structure was based on smaller, more labour-intensive factories, with a significant role for the United States, which provided capital and technology to the island nation. The government shifted its development policy towards high value-added technology-based industries. In the 1970s, the chemical and steel industries were the main focus of public development policy, followed by telecommunications equipment from the 1980s onwards.

Singapore: the Role of Education Policy for Growth

Singapore has also undergone a successful industrialisation process since the late 1960s. Initially, economic reforms were aimed at developing the most labour-intensive industry, to address the high unemployment and increasing labour supply, which put downward pressure on wages and thus activity.

In 1961, the Economic Development Commission was established, responsible for growth and the creation of an advanced economy. Singapore made significant concessions to foreign, high value-added investment, mainly through tax incentives and direct government support. Some sectors, such as petrochemicals and oil, were promised tax exemptions for foreign investment for 5-10 years, depending on investment, and a special industrial zone was created where production was concentrated. The main motivation for development policy was financing through targeted aid, mainly based on export competitiveness. In addition, better performing companies were given extra resources to grow further.

The development policies were so effective that by the 1970s, the labour surplus had turned into a labour shortage, which

led to a sharp rise in wages. As a result, neighbouring countries with large labour pools were a direct competitor and comparative disadvantage for Singapore. As in Taiwan, rising wages undermined the previous export-led economic growth based on a steadily increasing labour supply. The 1973 oil crisis affected Singapore the most among the 'little Asian tigers', because of the country's large oil refining industry.

From the mid-1970s, Singapore had to shift its economic strategy away from labour-intensive industries towards innovative industries and higher value-added production in order to sustain growth. Economic policy introduced new measures, including concessions and a favourable environment for foreign investment, and there was a significant effort to develop and further train workers throughout the economy to increase productivity. In addition, monetary policy in Singapore was a major contributor to economic growth.

The Singapore government placed strong emphasis on education, because the country's new direction required a skilled workforce. The state education system was designed to provide immediate practical knowledge, with a focus on engineering science. To this end, a significant proportion of the country's budget, around 20 per cent, was devoted to education, and English language teaching was compulsory.

China: the Beginnings of the Rise

In China, until Mao Zedong's death in 1976, the economy was seriously underdeveloped in terms of both productivity and industrialisation. Agriculture was not able to supply the needs of the population, industry produced exclusively for internal markets and in terms of technology it was relatively underdeveloped. As a result, China's economy was only moderately affected by the 1973 oil crisis. The deterioration in the terms of trade was small

compared to previous years, with oil and raw material needs being met practically from internal markets and neighbouring countries, mainly the Soviet Union.

In the 1960s, foreign trade and foreign financing were quite limited. Under Mao's dictatorship, production was mostly domestic, with few imports of foreign, mainly Soviet, raw materials, although in the early 1970s the central government tried to increase imports through mild reforms. These efforts were mainly concentrated in the petrochemical and oil industries, which imported technology from Germany, France and Japan.

The major turning point came with the development direction announced by the new Party President Deng Xiaoping in 1978 and the 'Open Door Policy'. Initially, the import of capital and technology was heavily regulated, with only state-owned enterprises and local governments allowed to invest abroad; this was gradually relaxed from the 1980s. In addition, the share of foreign capital investment and foreign borrowing was low, due to fears of external influence.

Reforms led to the creation of a number of special economic zones. These areas were partially exempted from strict bureaucratic regulations for foreign investment and working capital. China pioneered the export-led growth model as a large developing economy with a large labour supply and an unsatisfied internal market. This provided the basis for subsequent exports based on high value-added technology and economic growth.

Initially, reforms and special economic zones focused on heavy industry. However, due to the high energy demand of the heavy industry sectors, which was not available in sufficient quantities in the country even after the substantial imports of technology, the engine of growth was taken over by light industry from the early 1980s. In addition, a number of innovations were introduced in agriculture in the late 1970s to ensure a broad-based food supply. In the 1980s, with the Sixth and Seventh Five-Year

Plans, the Chinese government continued to provide substantial support to the energy industry in order to promote the growth of heavy industry, while the role of the telecommunications and information technology industries was also enhanced from the middle of the decade.

South Korea: a Key Role of Chaebol in Economic Growth

South Korea's economic development accelerated starting from the late 1960s, as did that of other countries in the region. During the period of 'great development', the state actively supported the economy, in cooperation with the central bank, in order to promote growth. The South Korean central bank provided a number of development loans to priority industries. In addition, the opening up to foreign countries in 1967 contributed to the growth by leaps and bounds.

From the 1970s onwards, the role of state-owned companies was eclipsed and the number of *chaebol* increased. The *chaebols* are giant family-owned South Korean corporations, which operate in priority state-supported industries and play an important role in the national economy. These large companies were included in the state's development policy, and extra support was given to large companies that performed well.

From the 1970s onwards, industry and the service sector gradually took over, while agriculture was relegated to the background. Whereas the share of people employed in agriculture was 63 per cent in the 1960s, it had fallen below 30 per cent by 1980. From the 1980s, South Korea underwent a gradual process of financial and economic liberalisation, which facilitated the second phase of South Korea's growth between 1980 and 2000.

The 1973 oil crisis affected South Korea more severely than neighbouring countries. In order to make the export-oriented model work, the country needed large amounts of raw materials. On the one hand, it was more integrated into international supply chains and, on the other, it imported more raw materials, especially oil. Most of the light and heavy industry was exported to the West, where, however, demand was lower due to the oil crisis. As a result, the terms of trade deteriorated drastically in 1974 and 1975, while exports fell by one quarter and imports rose by a factor of one and a half, mainly due to the surge in raw material prices. However, thanks to industrial development policy, the downturn did not last long. Exports were close to their previous level after 1976, and the import ratio also recovered. From the early 1980s, the spread of nuclear power in the region was able to meet a significant share of the growing energy demand.

XV

The State of the Hungarian Economy in the 1970s

Zoltán Szalai

This study presents internal economic developments in Hungary in the 1970s, with special emphasis on the economic reform of 1968 and its consequences. Data available until 27 January 2022 were used for this analysis.

The 1968 Reform of the Economic Mechanism and its Consequences

The economic reform of 1968 was necessary, because the previous rapid growth rate had slowed and it was difficult to raise the standard of living for the population. At the end of the 1960s, the 'extensive' sources of economic growth were exhausted and a shift to an 'intensive' growth model was called for. During this period, the growth rate in the developed world also slowed in a similar way, suggesting that there were common elements to the slowdown. The socialist countries followed the path 'travelled' by the developed countries with a considerable delay.

One of the consequences of the reform was widening income disparities and internal social tensions. The main reason for this was that individual companies were not able to equally make use of the increased autonomy resulting from the reform. As a result of the reform, income differentials emerged both between managers and other employees within each company (vertically) and between employees (horizontally), and between

companies within the industry and also between different sectors (for example, in favour of agriculture, which was previously discriminated against). Forms of labour organisation and ownership, such as producer cooperatives, co-operative sub-units, small-scale industrial enterprises, independent artisans, and innkeeper renting from the state in the socialist era, which had previously been considered second-class, proliferated and appeared, often providing much higher incomes for workers and owners than the large socialist enterprises.

However, the income reallocation was partly justified. An example of this is the restoration of profitability of agricultural activity. Previously, industrialisation had for decades been achieved through the redistribution of agricultural incomes through several channels (e.g. wages, prices, employment), but this was no longer justified in the light of new sectoral ratios. Social tensions often had an economic basis. Indeed, the increased income differentials were not always justified by efficiency or productivity gains, but were based on exploiting loopholes in bureaucratic rules (e.g. wage regulation, price regulation), circumventing regulatory constraints, or exploiting certain monopoly and shortage situations.

Governing Mechanism is Replaced by a System of Rules and Incentives

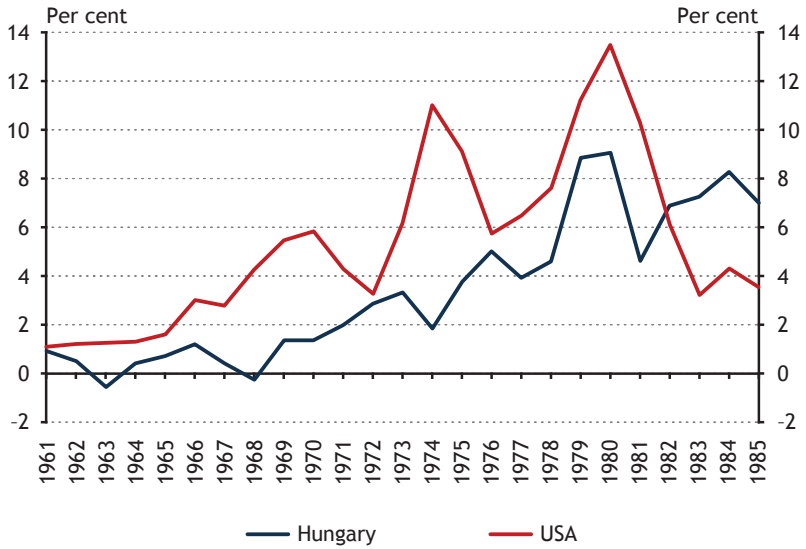
Following the 1968 reform, the five-year plan was no longer binding on companies, which used their increased autonomy to make decisions in response to incentives. Following the reform, economic governance sought to achieve the objectives of the plan indirectly through market instruments by shaping the regulatory environment. In practice, however, achieving the plan's objectives often required specific, ad-hoc regulatory changes or outright regulatory action. This became a practice and

a constraint for companies, especially by the end of the 1970s, as external indebtedness accelerated. This formalised incentives and corporate autonomy, and in practice was equal to a governing mechanism: the regulatory bargain replaced the plan bargain. This did not remove the expectation of the authorities to fulfil certain supply obligations, while individual companies were not allowed to become insolvent or bankrupt, which weakened the overall incentive.

Price Reform

After the economic reform, price-setting remained largely fixed or capped, i.e. regulated. The price of 50 per cent of consumer goods was regulated, and thus did not reflect production costs. As a result, the price system continued to contain a large number of subsidies, the source of which was corporate income absorption and budget deficits. This was reinforced by the increase in foreign trade import prices (raw materials, energy), which the authorities did not want to enforce in domestic consumer prices. After the reform, previously stable prices started to rise, which was a strong argument for opponents of the reforms. The rate of increase of the consumer price index rose from below 2 per cent in the 1960s to 4 to 5 per cent in the mid-1970s in Hungary, and then, as a result of the regulation of prices, to around 9 per cent in 1979-1980. By comparison, inflation in the US was already around 5 per cent in the early 1970s and had risen to an annual rate of over 13 per cent by 1980 (Chart 1).

Chart 1: Annual growth rate of consumer prices in Hungary and the USA



Source: HCSO, OECD

Major price reforms were only carried out in the context of the comprehensive price adjustment of 1979-80. This included major increases in the price of basic foodstuffs, including the abolition of the '3.60 loaf' in 1979. Prior to this, there were widespread price increases from 1 January 1975, but these did not yet affect retail prices. Budget price subsidies increased by HUF 5.5 billion, accounting for 1.7 per cent of budget expenditure.

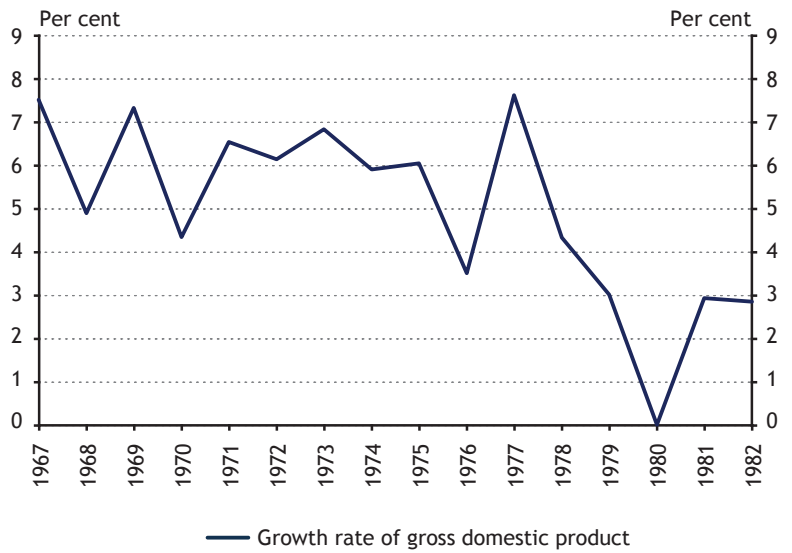
Producer prices were already regularly higher than consumer prices and the profitability of companies was maintained by state subsidies. The income reallocation was based on the parallel skimming of profits in other groups of companies. At the same time, the allocation of development funds hardly reflected profitability considerations. In 1976, subsidies to companies and cooperatives accounted for one third of budget expenditure. Finally, the party leadership decided to completely review the

price system and the subsidy system in order to make it more transparent, and envisaged a comprehensive 'price adjustment' in 1980, which was indeed implemented in the 1979-80 price reform.

Labour Policy and Economic Growth

Central control of the workforce was abolished, allowing freer labour flows between companies. Instead of central wage regulation, the authorities moved to average wage regulation, which on the one hand gave more freedom to incentivise performance, but on the other hand often hired workers with low wages to compensate for higher wages. Thus, while mobility increased, the increase in business efficiency was limited.

Chart 2: Annual GDP growth rate in Hungary



Source: HCSO

By the 1970s, maintaining the growth rate at around 5-7 per cent was increasingly difficult, necessitating a drastic slowdown by the end of the decade. It became clear that economic growth in

the previous structure was unsustainable. As a result, the growth rate of the Hungarian economy gradually declined from the high of 7.6 per cent in 1977 to a lower rate of around 3 per cent in the late 1970s and early 1980s (Chart 2).

Investments

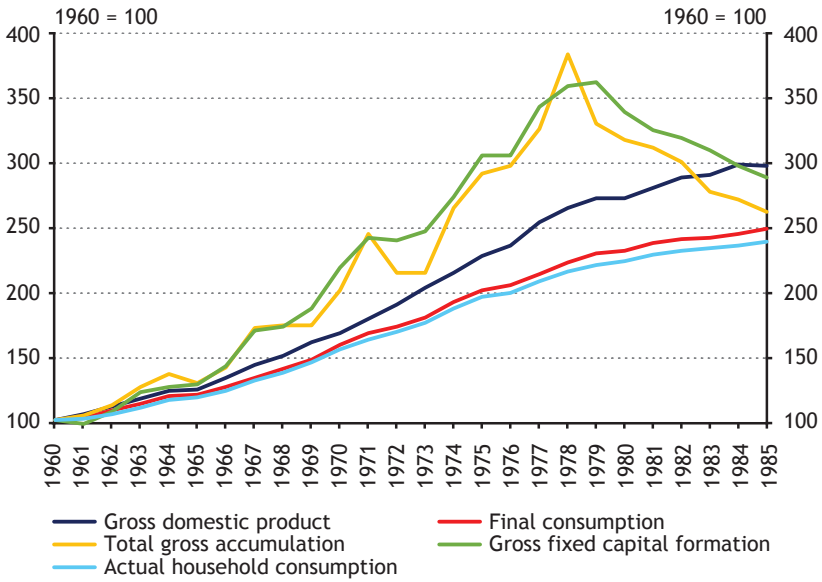
The reform's designers announced the decentralisation of investment activities. Under the original plan, 50 per cent of business investment would have been decided by companies, while the other 50 per cent would have been decided centrally. Over the years, however, this changed and the investment environment for companies remained unpredictable. Similarly, bank lending continued to be predominantly geared to central expectations, with little reference to profitability prospects. More generally, the banking system was not subjected to reform.

Investment trends were rather hectic and largely reflected the government's stop-and-go policy. Through the stop-and-go policy, ad-hoc measures were taken to correct overinvestment when problems in external and internal balance became acute. In a number of cases, the government directly instructed or otherwise individually 'encouraged' companies to invest, depending on the kind of the stresses it wished to address.

One persistent problem remained the start-up of too many investments and the delay in their completion. The literature is divided as to whether this cyclicality was triggered by the companies' soft budget constraint or the political leadership. It is agreed that there was no feedback to companies and therefore central restrictions were needed to correct the situation. The growth rate of investment fluctuated extremely strongly from one year to the next, from a maximum of 17 per cent in 1970 to a minimum of -0.8 per cent in 1972 (Chart 3). Final consumption varied in less extremely, but in a rather unusual way in terms of

consumption, ranging between a growth rate of 8.2 per cent (1970) and 2 per cent (1976).

Chart 3: Trends in key macroeconomic indicators



Source: HCSO

Public Finances

False data on the financial situation of public finances were presented to the public during this period. As Table 1 shows, the public and actual figures for the MNB's claims vis-à-vis the state differed significantly.

Table 1: Government debt in the MNB's public and actual accounting balance sheets (HUF bn)

MNB loan to the State	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
Public	10.9	14.9	15.5	16.8	18.3	20.8	24.3	24	22.6	33.4	26.5	27.7
Actual	170.8	224.7	272.4	333.7	396.2	446.1	469.2	482.5	525.5	518.2	530.3	531.6
Difference	159.9	209.8	256.9	316.9	377.9	425.3	444.9	458.4	502.9	484.8	503.8	503.9

Source: Simon (1996)

According to ex-post, retrospective calculations, the general government deficit was already well above 3 per cent from 1976, which was unusual for a socialist country, while the net financing capacity of the national economy was around minus 5 to 6 per cent after 1975 and even exceeded minus 10 per cent in 1978 (Table 2). By the second half of the 1970s, the net lending capacity of both public finance and the corporate sector had become significantly more negative, while the already low financing capacity of households had roughly halved compared to the beginning of the decade.

Table 2: Net financing capacity of the national economy and its main sectors as a share of GDP

Annual balance (percentage of GDP)	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984
National economy	-2.8	-5.1	1.1	4.4	-3.7	-6.2	-5.4	-6.0	-11.0	-6.3	-3.4	-2.3	-1.6	-0.7	0.0
Non-financial corporations	-3.8	-5.6	-0.4	2.4	-3.0	-4.4	-3.2	-3.8	-6.6	-2.9	-0.8	-0.5	-1.0	-1.6	-2.4
Financial companies	-0.2	-0.1	0.0	0.0	-0.1	0.0	0.0	-0.3	0.0	0.0	0.0	0.1	0.0	0.1	0.0
General government	-0.9	-0.7	0.2	0.2	-2.4	-3.9	-3.5	-4.0	-6.1	-4.6	-3.8	-3.2	-1.8	-0.4	0.9
Households	2.1	1.3	1.3	1.7	1.5	2.0	1.2	2.0	1.7	1.3	1.2	1.2	1.2	1.2	1.5
Non-profit institutions	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Source: MNB (2018)

Reversal of the Reform

Tensions in the early 1970s led to a partial and gradual reversal of the reform from 1972 onwards, with more stringent central measures again restricting the previously freer corporate management. One of the most spectacular such moves was the singling out and individual treatment of 50 large companies in 1973, following a political decision in 1972. In addition to the internal difficulties, tensions within the socialist camp also encouraged a 'reversal'. The Prague reforms were eventually completely reversed, because the Prague Spring of 1968 was seen as a consequence of this. Less spectacularly, a similar turn of events took place in several socialist countries, where the work of economic reform that had begun earlier was interrupted and central control was strengthened.

Summary

The tensions caused by the economic reform of 1968 can be traced back to the fundamental dilemma of the established socialist system. While the largely nationalised economy could be effectively mobilised for war-related production and the reallocation of resources between large sectors, this model could not be considered competitive in normal economic times. The reason for this lack of competitiveness was that profitability, quality, choice of goods and individual incentives were pushed to the background. Thus, the socialist economy that was implemented may have been efficient in macroeconomic terms, insofar as it exploited all physical and human resources, but it was inefficient at the enterprise level in terms of profitability, cost efficiency and quality of output. However, inefficiency at the company level also undermined macroeconomic stability through subsidies.

The reform sought to preserve the predominantly public ownership base of companies alongside social objectives, but also to improve corporate efficiency by introducing limited market requirements. The aim was to increase efficiency and product quality by strengthening corporate autonomy, profit-seeking and price signals, while preserving basic social objectives. However, this was not achieved through normative regulation and the use of market mechanisms, and the economic and social tensions that arose had to be corrected by administrative means. Overall, the gap to the developed Western countries could not be reduced, nor was it possible to continue to raise living standards as much as expected, especially following the deterioration in the external terms of trade. All such efforts ran into the constraint of external balance and indebtedness growth. These latter processes are described in the next study.

XVI

Evolution of Hungary's External Balance in the 1970s

Zoltán Szalai

This study presents the external balance and external indebtedness of the Hungarian economy in the 1970s. Data available until 15 February 2022 were used for this analysis.

Evolution of External Balance

The development of Hungary's external balance was a focus of economic policy throughout the period. The economic reform came at a time of transition, when it became clear that the potential for extensive growth had been exhausted and that production efficiency and product quality had to be improved. Hungary had been trying to expand its trade relations with the Common Market countries since the 1960s. One of the aims of the reform was to allow companies to make import and export decisions on the basis of profitability.

In the early 1970s, similar to the initial reactions of the OECD countries of the time, the Hungarian leadership considered the first oil price shock to be a temporary phenomenon. The fall in disposable income from the first oil price shock was offset by foreign borrowing, and thus there was no need to reverse the planned increases in living standards or to cut investment permanently. Although preliminary negotiations on Hungary's potential membership of the IMF and the World Bank had been

underway at varying degrees of intensity since the mid-1960s, accession was finally hastily agreed only in the spring of 1982, amid liquidity tensions. Until then, the country was only able to borrow mostly short-term bank loans on the international markets, while on the bond markets, longer-term and cheaper loans were not available.

In the early 1970s, the US dollar trade deficit increased and its rise could only be contained by restraining economic growth. As early as 1972, Hungarian Socialist Workers' Party (MSZMP) documents stated that at the planned rate of investment, the country's external balance would deteriorate seriously. It was at this time that the party leadership learned that the budget deficit had been understated by the administrations for years. (In the budgets for 1957-1967, there was in fact not a surplus of 5 billion forints, but a deficit of 17-18 billion forints, i.e. 7-9 per cent of national income instead of 2-3 per cent). For the first half of the decade, the National Planning Office expected an economic growth rate of around 5 to 5.5 per cent, although they knew that this would entail an above-plan increase in the capitalist foreign trade deficit and a further unintended accumulation of surplus socialist-related exports. The economy was not able to offset the capitalist (USD-denominated) imports at the planned growth rate with capitalist exports. At the same time, exports in the rouble relation could not be used to reduce the deficit in the capitalist relation.

Table 1: Subsidies per HUF of company profit (in HUF)

Subsidy per forint of company profit (in HUF)	1970	1974	1976	1978	1979
Mining	0.08	1.45	2.02	1.76	3.42
Metallurgy	0.48	0.29	0.70	0.61	0.42
Mechanical engineering	0.15	0.17	0.21	0.21	0.21
Building materials industry	0.06	0.19	0.10	0.19	0.24
Chemical industry	0.21	0.23	0.25	0.27	0.23
Light industry	0.26	0.25	0.55	0.64	0.60
Other industry	0.52	0.65	0.25	0.25	0.23
Food industry	0.40	2.66	2.40	2.77	2.49
Industry*	0.47	0.50	0.63	0.63	0.64
Agriculture	0.34	0.41	0.52	0.49	0.62
Transport-communications	1.03	1.46	1.69	1.57	1.70
Domestic trade	0.78	1.72	1.65	1.68	1.57
Foreign trade	0.88	0.87	1.95	1.76	1.57

Source: János és Hőgye (1982)

Following the surge in global market prices, export prices were expected to rise by an average of 6-8 per cent and import prices by 8-10 per cent. Since there was already a Party decision that prices could increase by up to 2 per cent, budget price subsidies consequently increased further (Table 1). In 1974, import price subsidies amounted to HUF 11 billion, or approximately 4 per cent of budget expenditure. In the case of food, the impact was moderated by the surplus revenue from the significant Hungarian food export surplus, caused by the change in terms of trade. The total loss to the national economy in 1974 was HUF 17-18 billion, due to an increase in import prices of more than 30 per cent and export prices of 15 per cent. The net debt in dollar terms reached USD 1.3 billion that year. However, the administration did not want to cut consumption and investment even in 1974 and only decided to do so after the first half of 1975, by which time the trade deficit had expanded by another USD 0.5 billion.

Strategic Review

The party leadership ordered a more thorough review of economic strategy in 1975. By 1977, a document on long-term foreign economic policy guidelines had been drawn up. The economic policy proposals were based on the assumption that the capitalist world economy was showing signs of crisis, a scientific and technological revolution was taking place, radical structural changes were about to happen, the shift in energy and raw material prices would continue and these processes would have a strong impact on the Hungarian economy. The document estimated the deterioration in the terms of trade in 1972-1976 at 23 per cent of 1975 national income, while the loss from further terms of trade deterioration in 1977-1980 was estimated at 26-33 per cent of expected national income in 1980. The concept continued to foresee an annual economic growth rate of more than 5 per cent, but still considered the external balance to be restorable by 1980.

It envisaged a major structural change, with the result that the production and export of products with low raw material and energy requirements, as well as petrochemicals and food machinery, would be promoted through a selective development policy. It anticipated significant export growth in both capitalist and developing markets, as well as in the CMEA. It called for the expansion of relations with the Common Market, and for diplomatic efforts to ease the market protection measures in place that restricted Hungarian exports. In the longer term, the forint was also being considered for convertibility.

One major problem for the structure of the economy was that the two export markets had different demands for products. In the framework of CMEA cooperation, Hungary undertook export and import commitments, which, in addition to tying up production capacities, entailed a capital (dollar) import obligation. Until the outbreak of the first oil crisis, the price of oil in CMEA trade lagged behind the world market price and thus implicitly

helped capitalist exports. According to the so-called 'Bucharest price principle', world market price changes were followed with a five-year delay and smoothed by the relative prices in rouble settlement. Gradually, however, the country also suffered a deterioration in the terms of trade of the rouble. In addition, the Soviet Union was increasingly reluctant to support the CMEA member states through low oil prices.

The tendency within the CMEA to consider energy and raw materials as 'hard' products, because they could be sold well for dollars outside the CMEA markets, was reinforced. Other products, such as more highly processed machinery and equipment, were considered 'soft' products because they were not easy to sell outside the CMEA. Most of Hungary's exports consisted of soft products, with the important exception of agricultural products, which could be sold for dollars, but it was precisely in this area that the Common Market protected its own market with high tariffs and quotas. Firms tended to produce for the less demanding Soviet market because their profitability depended less on success achieved in the convertible currency markets more important for the national economy. Gradually, they also tried to expand into developing countries, such as oil-exporting countries, with dollar-denominated businesses (Ikarus buses, electrical machinery, etc.).

The reform failed to achieve a breakthrough in improving the incentives for firms to increase their convertible export performance in a meaningful way. Convertible trade deficits, financed by foreign borrowing, persisted and increased. The growing surplus of rouble exports could not be reduced, and the country was unable to use this surplus (for example, to buy Soviet oil to replace Arab oil bought for dollars).

While it had been evident since the middle of the decade that continued high growth and domestic consumption would increase external imbalances, it was only in December 1978 that Hungary's leadership decided to initiate a sharp slowdown. The

slowdown restrained the economic growth rate and investment, and thus the external balance improved sharply: the current account balance deficit of USD 1.5 billion in 1978 was halved by 1979 and reduced to USD 300 million by 1982 (Table 2).

Table 2: Data on Hungary's indebtedness and debt service (1973-1982, in USD million)

	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
Gross debt	2,118	2,861	4,199	5,214	6,253	9,468	10,507	11,455	10,740	10,216
Net debt	805	1,338	2,000	2,618	3,580	6,141	7,123	7,571	7,477	7,267
Current account balance	53	-617	-567	-499	-853	-1480	-824	-733	-698	-299
Terms of trade loss (-)/ profit (+) compared to previous year		-425	-167	226	-152	38	-80	76	93	-49
Direct export of goods	1,463	2,066	2,209	2,343	2,661	3,178	4,063	4,863	4,884	4,831
Debt service	404	483	559	522	620	1,107	1,590	2,014	2,492	2,312
Debt service ratio (%)	27.6	23.4	25.3	22.3	23.3	34.8	39.1	41.4	51.0	39.6

Note: Debt service ratio = debt service/direct merchandise exports (dollar export)
Source: Baárné et al., MNB (2003)

Indebtedness

The trade deficit in the convertible relation was already persistent starting from the 1960s. In 1970, foreign currency debt amounted to only half a billion US dollars, accumulated through foreign trade deficits in previous years. Following the global economic commodity boom, the trade deficit increased rapidly. By 1977, the debt exceeded USD 6 billion, and by 1980 it had risen to USD 10 billion, increasing the debt service from 23 per cent of dollar exports to 43 per cent, and from 45 per cent to 60-65 per cent of GDP.

The trade deficit was accompanied by borrowing to build investment capacity that could help offset imports with increased dollar exports in the future. Unfortunately, however,

the use of these loans did not live up to these expectations. The exceptions were loans for the production of agricultural products and loans to increase the production of exportable goods. This was helped by the fact that this product group also saw price increases on the world market. However, the bulk of the dollar loans aimed at economic development were used for investments that did not pay off because they were used in declining industries, such as metallurgy, coal mining and textiles. Central economic decision makers misjudged the structural transformation of the world economy and were concerned about maintaining jobs in sectors that were unprofitable in the longer term as well.

The stock of foreign currency debt was further increased by its currency composition. Ex-post analyses showed that Hungary regularly borrowed in currencies for which interest rates were initially low, but later started to rise and the currencies appreciated (e.g. Swiss franc, Japanese yen), increasing the debt service burden.

Following the second oil price shock, global interest rates rose sharply, leading to a global debt crisis in the 1980s. The stock of external loans that existed at the outset increased significantly. Investments that had previously been expected to pay off became unprofitable under the new interest rates and market conditions. Far less than half of the Hungarian debt stock represented actual fresh capital raised, while most of it was the result of interest payments and foreign exchange losses.

The indebtedness was also reinforced by developments in international capital markets. After the first oil price shock, oil importers experienced trade deficits because they could not reduce their oil consumption in the short term. As a result, oil exporters were unable to use their sudden surge in dollar revenues, which they sought to lend to importing countries as a low-interest source. Low interest rates also showed low efficiency investment projects as viable. As a result, there was also a strong supply-side incentive to borrow.

After 1979, the situation changed radically and disinvestment became the dominant factor, which pushed Hungary to the brink of credit default. In the tight foreign exchange situation, an almost daily rationing of foreign currency supply to companies was introduced, which continued for about two years and was not resolved until the country's entry in the IMF's in 1982. In the mid-1980s, the Party leadership again opted for a 'flight forward' (with planned indebtedness), which resulted in gross debt rising to USD 20 billion by the end of the decade.

Conclusion

Decades of socialist economic practices in Hungary and Europe convinced the majority of experts and the Party leadership itself that the system could not be reformed and that it was unviable. However, the professional debates are still ongoing, and the crisis phenomena of deregulated capitalism and the performance of certain regulated or Asian forms of capitalism, and more recently the Chinese economy, shed new light on the earlier debates. Even in the debates of the time, there was a view that the difficulties of Hungary and the socialist countries and the economic problems of less developed countries, such as Latin America, were not significantly different from each other. These opinions attribute the debt crisis more to structural inequalities and fundamental instability in the world economy than to the unviability of the socialist system. A counter-example of structural inequalities is the success of the Asian 'little tigers', which were able to catch up in an unequal global economy. At the same time, these countries have not had to adjust to the global economy because of the scale of US direct capital investment. China is an example of how, unlike the Soviet and European socialist countries, there is a version of the socialist economy that can function with dominant state ownership and a 'soft budget constraint' on enterprises.

XVII

Causes and Consequences of the Breakdown of the 1968 Economic Reform in Hungary

Zoltán Szalai

This study shows that Hungarian economic reforms were halted in the early 1970s, before the energy price surge, because the economic leadership refused to take on the challenge of further widening income inequalities and curbing the rise in living standards. In retrospect, without radical property reform, the proposed reforms would not have met the expectations of the reformers. However, neither the political realities of the time nor the dominant domestic and Western economic theory of the time led reformers to think of property reform leading to private ownership until the mid-1980s. Data available until 6 March 2023 were used for this analysis.

The 1968 Economic Reform in Hungary

The economic reform of 1968 occurred because of the increasing difficulties in maintaining the pace of economic growth. Extensive sources of growth were being exhausted, and intensive growth based on productivity and efficiency gains required new economic management methods.

The new governance mechanism relied heavily on market incentives and also sought to link income distribution to performance. Accordingly, companies were also given greater autonomy in previously centralised decisions. The new mechanism initially showed promise, but new tensions soon

emerged in relation to both income distribution and fiscal and external balances.

Reasons why the Economic Reform was Stopped

The literature on the suspension and partial reversal of the economic reform process is unanimous in showing that this occurred shortly after its introduction in 1968.[4] In the years preceding the 1973 oil crisis, from 1971-1972 onwards, the Hungarian economic reforms already began to be reversed, although officially this was communicated as an adjustment and a continuation of the reforms. In practice, however, many steps were taken that went against both the spirit and the letter of the reform; there were both internal and external reasons for this.

Hungary's sovereignty was limited, and accordingly pressure on the country's leadership following the strategy changes in the Soviet leadership was an important factor. Among other things, the Soviets demanded the removal of Rezső Nyers, a key figure in the reform. The earlier reformist tendency was also reversed in other countries in the socialist camp (Czechoslovakia, Poland), partly citing the tensions generated by the reforms.[5] This turnaround was partially reflected also in Hungary's Party leadership, and the positions of the opponents of reform were strengthened.

There were also economic reasons for the shift in political power, which were attributed to the reform and it was deemed necessary to make adjustments. Investment had to be curbed as early as 1971 because of over-investment, and in 1972 it was

[4] Csaba-Szamuely (1998), Germuska (2014).

[5] For more information on the relationship between domestic economic reform and reforms within the socialist camp and their reversal, see Mitrovics (2015).

decided to remove 50 large companies from the normative competitive conditions, which accounted for about two thirds of exports. The external balance was severely disrupted (external indebtedness rose from USD 0.5 in 1970 to USD 1.3 billion in 1974), demonstrating that international competitiveness had not improved as a result of the reform. As a result of the changes in the global economy in 1973 – the rise in oil and raw material prices – Hungary's terms of trade in both capitalist and socialist relations deteriorated sharply and external debt rose to USD 10 billion by 1977.

As a result of the reforms, social tensions rose along with the economic tensions. The relative income position of industrial workers, who were the social base of the socialist system, deteriorated in comparison to, for example, the income position of workers in agricultural cooperatives and industrial cooperatives and those living on secondary smallholder incomes. There was also a widening of income gaps within companies, partly as a result of the reform to incentivise performance (profit-sharing).

The related price reform and surging prices on the global markets created internal price pressures that the political leadership did not want to fully and quickly translate into domestic prices. Therefore, the already widespread system of price subsidies and price controls was maintained, placing an increasing burden on public finances. However, even the Party leadership was not aware of the true state of public finances (deficit) until the early 1970s.[6]

Corporate autonomy was again replaced by direct state intervention. These and other reasons, both external and internal, political and economic, confirmed the need for the Party leadership to take control of processes considered 'dangerous' and to replace the corporate autonomy targeted by the reform

[6] Germuska (2014), p. 131, János and Hőgye (1982) and Veszteg (1980).

and the indirect management decided through market incentives with more and more direct interventions. This was made possible by the fact that the companies were still owned by the state, through the state administration. Taking advantage of this, the state, ministry and Party organs continued to instruct companies, despite the fact that the reform had removed direct instructions.

The oil price shock of 1973 exacerbated the above developments, with prices deteriorating further in USD settlement and then also in the CMEA relation. As a result, both the trade deficit in USD terms and the budget deficit continued to widen. By 1975, the projected deterioration between the export and import price indices of 2 percentage points had risen to 15 per cent. This required intervention to stop further external USD indebtedness. In 1975, a widespread price increase was undertaken, but this did not yet affect consumer prices. Although the National Agency for Materials and Prices constantly examined international and domestic price developments and proposed raising consumer prices, this was not accepted by the political leadership. Producer prices exceeded consumer prices, which were compensated by increasing state price subsidies. In 1976, subsidies to companies and cooperatives already amounted to one third of the budget. Despite these developments, the economic decision makers foresaw an average economic growth rate of 5.5 to 6 per cent for the next decade and a half in the next five-year plan, running from 1976 to 1980. In 1978, however, the mounting external imbalances forced the economic leadership to cut back sharply in order to reduce the USD-denominated trade deficit.

In addition to the external deficit, convertible currency loans for restructuring investments contributed to external indebtedness. Between 1973 and 1982, indebtedness rose from USD 2 billion to USD 10 billion.[7] Following the second oil price shock in 1979, the USD liquidity shortage became permanent and almost daily

[7] Baárné and co-authors (2013) (MNB).

rationing was introduced, which was alleviated only by IMF entry in 1982. The second wave of indebtedness occurred in the middle of the decade, at which point the economic leadership tried to forestall the problems by accelerating investment.

Reversal of the Reforms

The literature on the reforms cites the reversal of the reforms and the failure to proceed with further reforms as the reason that the expected increase in economic efficiency was not achieved and that Hungary's arrived at regime change as one of the most indebted socialist countries.[8] The reversal of reforms had already started before the 1973 oil crisis, in response to economic and social tensions and the anti-reform trend in other socialist countries. The reasons for this are attributed by some to the opposition to reform within the party ('workers' opposition'), the anti-reform stance of large corporation leaders and the anti-reform, anti-union alliance. More generally, it is also explained by the opaque relationship between the central authorities (Party, sectoral ministries, Economic Commission and State Planning Commission, regional Party organisations)[9] and the companies, in which the governing bodies continued to set expectations (responsibility for supply, export expectations, export tenders) and in which the company managers also had an interest, due to the latter's exposure to external and internal competition, in order to obtain favours. The reform therefore did not achieve a

[8] The data according to today's methodology show a less favourable income situation in the socialist countries compared to the same period. At the same time, even with the data of the same age, convergence in Hungary stalled, which also motivated the reform, but the lag also did not reverse after 1968; see Tomka (2010, 2011).

[9] Among others Antal (1978), Bauer (1982), Lengyel (1978) and Szalai (1989, 1993).

degree of autonomy for companies that would have made them sufficiently responsive to market signals.

With the oil and commodity price shock in the early 1970s, it was recognised relatively early on that these changes were permanent, not temporary. This realisation was reached by the Party leadership in almost all OECD countries[10] by the mid-1970s, and even appeared in the press and the professional literature. More recent archival research has shown that these assessments reached the relevant state organs at about the same time, well before the second oil shock.[11] In July 1975, the Political Committee of the MSZMP initiated the preparation of an analysis for the foundation of a long-term foreign economic policy, which was completed in 1977. As early as 1974, the National Agency for Materials and Prices proposed in several analyses a reform of the price system that would have reduced the gap between world and domestic price ratios and reduced budgetary expenditure in the form of consumer prices and subsidies to enterprises. The consumer price correction was delayed until 1980, but the price increases applied in the corporate sector from 1975 onwards were also insufficient to reduce the need for subsidies, which still accounted for one third of budget expenditure in 1977. Despite this, the economic plan envisaged an economic growth rate of over 5 per cent until 1980, and neither the growth rate of household consumption nor investment was planned to be curbed.[12]

Thus, it was not for lack of information or misunderstanding or misjudging the nature of the global economic changes that the political leadership did not pursue reform. Reformer economists

[10] See the so-called McCracken Report of the OECD: OECD (1977). The Commission operated from 1975 to 1977 and its main findings included classifying the structural changes in the global economy and the terms of trade changes as permanent.

[11] Germuska (2014).

[12] For more details on price and support measures, see Giday (2021).

became increasingly convinced that without a change in the institutional system of economic governance, corporate autonomy could not be achieved, and therefore even a reform of the price system was considered insufficient without institutional reforms.[13] However, they argued that the Party leadership did not have the courage to do this because they did not want to relinquish control of the economy and because reform of the price system in general also undermined the legitimacy of the ruling power and a continuous rise in living standards. Instead, the political leadership hoped that by temporarily taking on indebtedness, investment in economic restructuring would improve the efficiency of the economy over time and be able to offset the deterioration in the terms of trade. This, however, proved to be an overly optimistic expectation.

Consequences of the Stalled Reforms

Although in the 1970s it was the terms of trade shock that made it cheap to borrow US dollars due to the abundance of petrodollars, the policy tightening by the US Federal Reserve, which began in 1979, resulted in dramatic changes on the international capital markets. Interest rates rose and Hungary's rapid debt accumulation became increasingly unmanageable. Meanwhile, the expected efficiency gains from economic reforms also fell short of the expectations, economic growth slowed and Hungary's lag behind developed countries widened.

Most contemporary reformers generally attributed the relative failure to excessive caution with and inconsistent implementation of the reforms. This was partly explained by the fact that the reforms would have narrowed the scope of central control and, at least in the short term, would have increased

[13] Szamuely – Csaba (1998).

external and internal imbalances and exacerbated social tensions. Often unspoken, every proposal also involved the question of whether it was still compatible with socialism, i.e. with the very system itself.

Looking back from the regime change, we can see that the role of the market did not extend to the market for all goods and the social sphere. A capital market was not originally envisaged, but in the long term a two-tiered banking system was planned. In the 1960s, it was already expected that the forint would become convertible and that Hungary would participate in international finance (IMF and World Bank membership). The proposals being discussed would have broadened the scope of markets, extended them to as many markets as possible and made companies respond to real market prices in their production and investment decisions. The most striking difference between the perceptions of today and then is how late the transition to a capitalist economic model based predominantly on private property emerged (only in the second half of the 1980s). As ex-post evaluations show, without property reform, markets are necessarily 'simulated', artificial, because there is no real wealth interest, i.e. no real profit interest, and no fear of bankruptcy.

Property reform was also discussed in the 1970s, but at that time there was no question of traditional private ownership as the dominant form of ownership. Even Tibor Liska's radical, Hayekian-inspired entrepreneurial model imagined a socialist market economy, where 'ownership' can only be kept as long as it is operated most efficiently by the person/entity using it, which must be proven in a continuous bidding situation, in competition. In return, however, everyone 'shares' in the social inheritance of the common productive assets.

The less radical proposals would have abolished mainly the 'state administration' type of state ownership and replaced it with separate state ownership entities (public asset managers,

holding companies, public or market institutional investors, insurance companies, pension funds, banks, etc.), **as known in the developed capitalist countries**. Some proposals would have socialised (democratised) administrative property by involving various levels of social organisations (local authorities, municipalities that did not exist at the time, trade unions, workers' groups, etc.) in the operating of the property. Other proposals suggested adopting the Yugoslav and Polish forms of self-governance.[14] Workers' self-governance had a sour taste to it for the national Party leadership because of the role played by workers' councils in 1956. By the 1980s, the Yugoslav model of self-governance no longer seemed attractive enough due to increasing external indebtedness, despite the fact that the supply of consumer goods was in many respects wider and of better quality than in the CMEA countries.

The idea of ownership reform was already raised in the mid-1980s paper 'Turnaround and Reform', which laid the foundations for regime change, but the paper was still cautious in proposing an explicit restoration of capitalist private property. The study also examines the diversity of forms of ownership, which must be adapted to the sectoral and specific characteristics of the business in question. Property was approached pragmatically as a social 'technique' for efficient management. Since the subject was still taboo in the mid-1980s, in the primary public sphere no space was given to opinions that did not believe the economy could be reformed without restoring private property.

At the same time, Western economics was also ambivalent about the question of ownership. In standard microeconomics, ownership does not play a significant role: there are households that own companies. Households receive both wages and shareholder dividends, but the ratio between the two is irrelevant.

[14] E.g. Bauer (1982).

The initial wealth and income distribution is irrelevant, because in a perfect capital market, all profitable firms can raise funds. In the 1970s, applied economics was dominated by convergence theory, which predicted the convergence of capitalist and socialist systems: in both systems, the emerging bureaucratised large corporation would be the dominant organisational form, led by paid managers and career employees, but who were typically not majority shareholders. Therefore, maximising shareholder value is also a secondary consideration. It was assumed that socialist enterprises could be run in a similar way by paid managers. Only the monetarist, neo-liberal shift of the 1980s clearly broke with this view and brought differences to the fore, with Milton Friedman proposing the requirement of increasing 'shareholder value' for managers.

The reform proposals of the 1970s were later not even seen as real reform by the reformers themselves, and regime change was seen as the only viable alternative. A regime change was not a reality in that period, but as a conceptual experiment, it is possible to consider what would have happened in the event of a regime change. For a possible answer, it is worth recalling how the capitalist countries of the time performed during these decades. The picture is mixed,[15] but generally we see that they were exposed to considerable adjustment pressures: In Western Europe as well, during the first oil price shock, governments were temporarily hesitant (except, for example, in the FRG), but especially after the second oil price shock, they realised that a very significant increase in efficiency in energy and raw material use was needed to adapt.

The deterioration of the terms of trade in Western Europe also exacerbated the struggles over the distribution of national income (strikes, labour legislation) **and the initial decline in the profit share was restored by reducing the wage share**. Italy and

[15] Szalai (2022).

Belgium accumulated the high levels of public debt they still have today. Britain was forced to turn to the IMF, accepting onerous conditions in exchange for a loan, because the external imbalance was becoming unmanageable. Overall and in the longer term, however, the advanced capitalist countries were more successful than Hungary in adapting, and the enforcement of adaptation through market prices mostly played a role in this. Another legacy of the era is that it was a significant stage in a global regime change, which we might call the monetarist or neoliberal turnaround. One of the results of this has been to halt, and in some cases and over time reduce, the growth of the wage share, and to restore the profitability of companies under the new terms of trade.

Less developed Latin American countries, which suffered the debt crisis of the 1980s and became mired in debt, were not so successful. This, in turn, suggests that adaptation in the periphery or semi-periphery of the global economy was much more difficult, if not impossible, than in the centre (world-system theory).[16] Somewhat to the contrary, some of the East Asian countries showed very successful and sustained catching-up, but followed a different path than that suggested by Hungarian reformers and Western advisors, including international financial institutions such as the IMF and the World Bank. A common economic policy element in these countries was the role of the state in economic development,[17] extensive administrative, financial and other market regulations, as well as restrictions on international capital flows and state control of domestic capital allocation. In a typical phrase of the time, these countries did not take the advice that could be summed up as 'get the prices right' and they deliberately used 'wrong prices' or at least prices for development

[16] See Szegő (1989).

[17] In the Hungarian literature, Géza Kozma represented the concept of the 'entrepreneurial state'.

purposes that were different from free market prices.[18] The 1997 Asian financial crisis was seen by many as evidence of the unsustainability of the Asian model, but the convergence process continued after the crisis.

The Chinese model[19] in particular demonstrated that there is a successful catching-up process that is an alternative to the reformers' proposal.[20] Even in the 1980s, the reformers who 'coalesced around' the document '*Turnaround and Reform*' did not consider this Asian model desirable, because – while acknowledging the economic successes – they feared that the dictatorial political system that necessarily accompanied it would risk that the economic successes would not be realised, whereas the reformers at that time (in the 1980s) had already set the democratisation of the system as their goal.[21]

From the mid-1980s, the authors of 'Turnaround and Reform' had already strongly influenced the economic transformations, and this alternative was pushed into the background. This was strongly supported by the fact that the international financial institutions heavily influenced the further course of reforms, which supported market-oriented reforms, but gave little

[18] Stiglitz (1996), Amsden (1992), Wade (2005).

[19] Lengyel (1987).

[20] We cannot enter into the debate on how to assess the Asian developmental state model. Opinions are extremely varied. There was a view that the validity of the mainstream model was not affected at all, it was just that the state was fortunate to have set relative price ratios and main (key) sectors that the market would have dictated. So it is just a lucky coincidence, but it should not be followed, because it is doubtful that the 'imitator' will be so lucky again. At the other extreme, China represents a completely different, non-market-driven model, with markets playing a subordinate role; it represents a successful, non-Soviet-type socialist model of state control. See, for example, the discussion of the World Bank's study on the subject: World Development, Vol. 22, No. 4, 1994.

[21] In the mid-1980s, 'Turnaround and Reform' did not yet propose the usual parliamentary, multi-party democracy in the Western sense.

consideration to the economic structure and sectors that could ensure sustainable growth.[22] They apparently thought that structural changes should be left to the free operation of market incentives and that previous government experiments were even harmful because they contributed to indebtedness. With the change of regime, the issue was taken off the agenda, as the rapid inflow of direct capital investment determined the direction of development. At the time, rapid and massive privatisation, liberalisation and the shock-like introduction of financial laws were on the agenda, while Hungary was competing – and doing very well – in attracting working capital. Indeed, rapid European integration put Hungary's region in a better position than the more peripheral, albeit previously integrated, southern European countries. However, it has now become clear that in this competition, the progress made by each socialist country in market reforms and the application of 'correct market prices' played little role. Nevertheless, there is now a growing recognition, even at European level, of the need for industrial policy, without which countries will be at a disadvantage in the global economy.

Summary

The stalling of the reforms could be explained by the fact that they would have entailed conflicts that the political leadership did not want to take on. The suspension was triggered by real economic and social tensions, but the results of the reforms were not realised within the framework of the system. The reforms did not bring about resounding success, Hungary's economic performance did not change significantly compared to the other CMEA countries and they did not prevent it from falling behind the developed centre. Catching-up only started again after

[22] Lóránt (2018).

the change of regime, following reintegration into the global economy, which involved privatisation and liberalisation. The post-change experience also taught Hungary another important lesson: Hungary's claimed advantage over the other former socialist countries, which had implemented fewer reforms, did not prove to be insurmountable. The three small Baltic countries that are converging fastest are those that did not have any significant reform history. After decades of delay, it seems that they may be able to repeat the example of Finland, which was able to catch up from a semi-peripheral position in Europe, ahead of Portugal, Italy or Greece. Within the region, the role of direct capital investment is crucial to catching up, which was not a realistic possibility under the previous system.

The experience of Asian countries shows that a non-market-driven development path would have been possible. In this context, the example of China shows that a one-party system may be able to foster more dynamic economic activity, while allowing markets to play a significant role and even allowing some direct capital inflows. The transfer of vital, cutting-edge technology also played a key role in China's economic development. Today, it is also capable of conducting its own basic research in leading, future-oriented industries, which could threaten the West's technological advantage in the long term.[23] A country with a continental size and population, it is now recognised as having the potential to challenge the hegemony of the US in the global economy. Of course, even together this would not have been a realistic alternative for the smaller socialist countries, but together with the Soviet Union, it was not precluded, simply because of the size of the economy.

It is a sign of the changing times that we are on the brink of another regime change, which brings new lessons for the evaluation of reforms. In the 1970s, the market-driven model

[23] Lazonick (2004), Weber (2021) and Weber and Qi (2021).

of the 1980s was just emerging. In this, the role of the state, especially in the welfare areas, was reduced, macroeconomic policy was geared towards price stability, even though an increase in unemployment, and the evolution of the economic structure was left to market signals. Even in Europe, development policy (industrial policy) was on the decline, and the state had to remain market-neutral. Today, professional opinion is rapidly changing, based on the lessons of numerous episodes of financial instability, income and wealth inequalities and the environmental crisis. It turns out that the price system and the free flow of capital alone do not give the correct signals for economic, social and environmental sustainability. Today, the new relationship between markets and the state is back on the agenda, including the evolution of prices and the role of economic incentives. Again, industrial policy and innovation policy considerations[24] dominate economic policy thinking in the EU,[25] China,[26] even the US.[27] Even free trade, previously considered taboo, is being subordinated to geopolitical considerations, as can be seen in the sanctions or protectionist policies of the US and its allies.

These developments warn that economic reforms must be assessed in their own context. If we ask the question at the time of the regime change, back then reforms were the only feasible way towards a market economy, within the constraints of the system. However, from the present perspective, the picture changes dramatically when we see that many of the assumptions about market-led economic development were illusions and mistakes.

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[24] Szalai (2016).

[25] Next Generation EU, https://next-generation-eu.europa.eu/index_en

[26] Made in China 2025, https://www.cfr.org/backgrounder/made-china-2025-threat-global-trade

[27] Inflation Reduction Act, https://www.whitehouse.gov/briefing-room/statements-releases/2022/08/15/by-the-numbers-the-inflation-reduction-act/

XVIII

The Economic History Legacy and Lessons of the 1970s

Flóra Balázs – Zoltán Simon

The patterns of the 1970s offered many lessons for the current decade of 2020. This study reviews the events that were crucial in the 1970s and compare them with current economic developments. Data available until 4 January 2024 were used for this analysis.

Introduction

The 1970s marked a whole new era for the world economy. The new decade brought many challenges, with the world's economies having to cope with the 1973 oil crisis and its economic consequences, the collapse of the Bretton Woods system and the second oil crisis in 1979. These shocks to the global economy triggered a transformation of the international financial system and international relations.

The world's countries reacted differently to the shocks of the 1970s in terms of economic policy. The different economic policy responses to the shocks, such as different monetary policy measures, and the interaction between fiscal and monetary policy and other economic policy responses led to significant differences in the economic outcomes following shocks in various economies. The decade of volatile and high inflation was finally brought to an end by record high interest rates and an emerging recession, and the monetary policy framework was also transformed. The 1970s also saw the institutionalisation of central bank independence, globalisation and the rise of global trade.

Economic and Inflation Trends

Both in the 1970s and today, the rise in inflation stems from higher energy prices, to a large extent owing to geopolitical factors. In the 1970s, geopolitical tensions were triggered when Richard Nixon, then President of the United States, asked Congress for aid to Israel for the Yom Kippur War. The request for aid led the Arab Organisation of the Petroleum Exporting Countries (OAPEC) to impose an oil embargo on the US. The embargo stopped US oil imports from OAPEC, and OAPEC cut its production in several stages, causing a significant increase in world oil prices and inflation. Inflationary trends were exacerbated by the breakdown of the Bretton Woods system in August 1971. After the break-up of the Bretton Woods system, the depreciation of the USD dollar was also an important factor in the rise in oil prices. Since the price of oil was fixed in dollars, the devaluation of the dollar caused OPEC nations' revenues to fall, so they tried to match the price of oil to gold. With the end of the Bretton Woods system, the convertibility of the dollar into gold was abolished, and the price of gold rose from a fixed USD 35 to USD 455 per ounce by the end of 1970.

The second oil price explosion was also linked to a geopolitical event. The Iranian Revolution, which erupted in 1978 and ended a year later, caused Iran's oil production to fall significantly. The uncertainty created by the Iranian Revolution triggered large-scale speculative buying in the oil market. Coupled with strong global demand, this led to a significant rise in oil prices. Oil prices started to rise in mid-1979 and more than doubled between 1979 and April 1980.

The oil price shocks of the 1970s encouraged the global economy to seek alternative solutions and to consume energy less and more efficiently. The dramatic rise in energy prices led to a widespread fall in consumption, which in turn prompted a boom in the use of other energy sources and an increase in energy

efficiency around the world. This trend can also be observed in current developments. The surge in oil and gas prices gave renewed impetus to the green transition and also led to a fall in consumption.

Just as in the 1970s, it was geopolitical events that also triggered the energy crisis today. Russia's invasion of Ukraine led to major disruptions in the production and trade of goods exported by the two countries, with widespread implications for the global economy and energy market developments. Russia was the world's largest exporter of gas in 2021 and second only to Saudi Arabia in terms of oil exports.

The geopolitical conflict has led many countries, including the European Union, to take steps to reduce energy imports from Russia and announce sanctions against Russia. In addition to financial and technological sanctions, the EU imposed an embargo on coal imports in August 2022, a ban on imports of Russian seaborne oil from December 2022 and a ban on refined petroleum products from February 2023. In addition, the G7 countries, EU Member States and Australia agreed to introduce a price cap of USD 60 per barrel for Russian seaborne oil from 5 December 2022. Russia subsequently decided not to supply oil to countries that supported the introduction of the oil price cap. Overall, the outbreak of war triggered an energy price shock not seen since the 1970s. Some commodity prices were already rising before the war, but the rate of increase accelerated dramatically after the conflict.

Other factors also led the rising of inflation in the early 2020s. Following the outbreak of the Covid-19 crisis, global trade began to falter due to disruptions in supply chains. Supply-side shocks have resulted in a global imbalance between supply and demand, leading to significant cost shocks for many products and services. The emergence of deferred demand during the reopening following the first wave of the Covid-19 crisis further worsened the supply/demand balance. In addition, when the Covid-19 broke out, governments typically launched significant fiscal stimulus

programmes, which further fuelled inflationary pressures in some economies.

Differences in Monetary Policy Responses

The monetary policy response to inflation shocks differs markedly between 1970 and today. In the early 1970s, monetary aggregate targeting became increasingly common as a monetary policy regime. In hindsight, however, it has become clear that monetary aggregate targeting has was not effective in bringing down inflation. The first and second oil price shocks of the 1970s were met with different reactions from central banks. Recognising their earlier mistake, during the second oil price shock, they set their sights on bringing inflation down as soon as possible, with more emphasis on real economic considerations, which later paid off. While at the beginning of the decade, among the leading central banks, the Federal Reserve tightened to a lesser extent in response to the first oil price shock. Then, when inflation rose above 7 per cent again in 1978, the central bank reacted by moving towards a tighter stance, but the tightening proved insufficient and inflation continued to rise, reaching 9 per cent by the end of 1979. In 1979, Paul Volcker was appointed as the new Fed Chairman, who, unlike his predecessors, advocated a much tighter monetary policy and made inflation a priority, even at the cost of real economic sacrifices. Under Volcker's leadership, the Fed raised the policy rate from 11 per cent at the end of 1979 to 19 per cent in 1981. As a result of the tighter targeting, inflation fell from a peak of 15 per cent to 4 per cent by the end of 1982.

Most central banks already faced inflation shocks in the 2020s, under a different inflation targeting framework. Inflation targeting became widespread and accepted in the 1990s. A central element of inflation targeting is the setting of a medium-term inflation target, which contributes to price stability by anchoring expectations. Another important element is the independence

and accountability of the central bank, which gives the regime its credibility. In the 1970s, this was not yet common and widespread. After overcoming the inflationary shock of the 1970s, central banks gained considerable confidence. This helped them to develop the current framework and gain their independence.

Compared to the 1970s, most central banks reacted much more quickly and decisively to the current inflation shock, keeping the price stability objective as a priority. Most central banks have now reached a sufficiently restrictive interest rate level to support the achievement of inflation targets.

In the field of inflation and growth dynamics in the 2020s, the coordination of monetary and fiscal policy is once again in the spotlight. Based on the experience of the 1970s, central banks that respond to high inflation in a timely and decisive manner can start their cycle of interest rate cuts earlier, as inflation falls. At the same time, the role of fiscal policy in the fight against inflation is also becoming more important. Indeed, the role of monetary policy is necessary for the successful achievement of the inflation target, but not sufficient without the discipline of fiscal policy.

Debt Trajectories and Labour Market Differences

The oil price shocks of the 1970s and the collapse of the Bretton Woods system were accompanied by the indebtedness of countries. Soaring energy prices, rising inflation and slowing economic growth caused budget deficits to rise. In the current environment, interest rate increases, increased social spending and defence spending due to military conflicts could again be associated with rising public indebtedness. The unprecedented budgetary support during the pandemic and mounting social, military and green transition spending could make debt trajectories more difficult to sustain.

Current labour market developments have resulted in different wage and pricing dynamics compared to the 1970s. In the 2020s, wage increases typically have lagged behind inflation, i.e. real wages declined, which contributed to faster disinflation, while corporate profits were soaring, indicating the risk of a profit-price spiral rather than a wage-price spiral. One important difference is that the structure of the labour market is much more flexible today than it was in the 1970s. The power of trade unions is now weak, and inflation indexation in wages is less dominant. The bargaining power of workers has also weakened considerably since the 1970s, and the pricing power of companies has become more dominant.

The structure of society was also different in the 1970s. The growing working-age population of the baby boomer generation fuelled the growth and development trends of the time. Looking ahead to the 2020s, an ageing society will be an increasing challenge in developed countries. An ageing population could lead to higher social spending, which, together with rising budget deficits, could increase inflationary pressures in the economy. On the other hand, consumption patterns and propensity to consume tend to change as society ages.

Conclusions

Developments in the 2020s are now often compared to events in the 1970s. As in the 1970s, the global economy was hit by a series of shocks in the early 2020s. The supply disruptions caused by the Covid-19 crisis and the energy crisis caused by the Russian-Ukrainian war are reminiscent of the oil price shocks of the 1970s. Throughout history, there are many cycles, regularities or patterns that recur at certain intervals that should not be ignored, and thus the developments in the 1970s can provide many lessons for addressing the challenges of the current decade.

Overall, central banks have been more successful in dealing with the current inflation shocks than in the 1970s. This is mainly due to strong and timely action by central banks and caution about the emergence of second-round effects. The causes and circumstances of high inflation are also partly different. The high inflationary environment of the 1970s followed an important paradigm shift. The global financial system changed fundamentally, bringing with it a more volatile economic and financial environment. The collapse of the gold-based Bretton Woods system, oil price shocks and the role of fiscal dominance together resulted in the high inflation environment in the 1970s. There has been no similar international monetary regime change in the recent past, with global financial and trade settlements remaining largely USD-denominated and the financial and geopolitical dominance of the United States, though weakened, remaining intact for the time being.

In the long run, different dynamics may affect economic and inflationary developments. What was helped by the reforms of the 1970s – globalisation, the growing role of the US dollar, the boom in global trade, technological progress – has been significantly reshaped by the global conflicts of the 2020s and the pandemic. Geopolitical tensions and the fragmentation of supply chains could trigger a process of deglobalisation, which could have a negative impact on economic growth and re-inflate inflationary pressures in economies, posing a major challenge for both monetary and fiscal policy.

In the 2020s, a restructuring of global power relations is underway. In the long term, this could lead to another paradigm shift. While the 1970s finally brought about the dominance of the Western model, including the liberalised market economy, the Asian model, and China in particular, is now challenging the hegemony of the US-centric model. The movements in world power relations reflect global shifts towards a bipolar world order, with the US in the West and China in the East. One important

question is whether, if this trend is realised in the world and the current unipolar system is replaced by a bipolar world order, it will be based on cooperation or whether there will be constant confrontations between the two blocs.

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This collection of studies was written and compiled in the recognition that, as in the 1970s, the world's economies have arrived at a point when they are at the end of a successful developmental phase, but that this phase can no longer continue unchanged. At such epochal boundaries, it is obvious to draw on the experience of the past to develop successful adaptation and transition strategies.

The studies in this volume show that the responses to the oil price shocks of the 1970s were not uniformly optimal at the outset. This was due to the insistence on economic policies that had worked in the past, but had proven ineffective in the meantime, and the mistaken perception that the shock itself was temporary. The different monetary policy and economic policy responses had a lasting impact on the subsequent development of each economy. As in the 1970s, the current decline in the terms of trade and the high inflation environment has taken countries by surprise. However, it is important that this time economic policy decisions be made armed with the experience of possible past mistakes and the proper lessons learned, because the trends that are established now will also have a lasting effect on our future.

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