

# Exchange Rate Cooperation Agreement between Portugal and Cabo Verde: characterisation, developments and challenges after 20 years

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April 2020

## Abstract

The Exchange Rate Cooperation Agreement between Portugal and Cabo Verde (ERCA), in place for more than two decades, is a success case that deserves a deeper analysis. This article describes the agreement, its main goals – promotion of macroeconomic and financial stability and enhancement of economic openness to the rest of the world – and their reach. Some of the challenges that can be anticipated are also discussed. The macroeconomic performance points to the fulfillment of the envisaged goals. Monetary policy, aiming to ensure price stability, turned out to be credible and inflation converged to levels close to the ones observed in the euro area. Trade openness also increased significantly, in the context of accelerated economic and *per capita* average income growth. Among future challenges, it's worth mentioning the necessity to continue to promote sustainable economic growth, framed by balanced public and external accounts. To this aim, contribute not only budgetary consolidation measures but also structural reforms that enhance the investment in human and physical capital and the potential growth of the Cabo Verdean economy. (JEL: E31, E32, E42, H62, H63)

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## 1. Introduction

Cabo Verde faced several challenges over the last decades. In 1998, the Ministers in charge of Finance matters in Portugal and Cabo Verde signed the Exchange Rate Cooperation Agreement (ERCA) that established two main goals: to promote the macroeconomic and financial stability of Cabo Verde and its greater openness

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Acknowledgements: The authors would like to thank Nuno Alves, António Antunes, Rita Duarte, Malaquias Lopes, Sílvia Luz, Pedro Duarte Neves, José Carlos Pereira and Carlos Rocha for helpful suggestions and contributes. The analyses, opinions, and findings expressed in this article are those of the authors and do not necessarily coincide with those of Banco de Portugal or the Eurosystem.

Note: This article was submitted for approval on February 21, 2020, before the World Health Organization declared the COVID-19 a pandemic on March 11.

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to other countries, fostering economic and financial relations between Cabo Verde, Portugal and euro area countries.

The ERCA is built on the adoption of a fixed exchange rate peg between the currencies of both countries, which is supported by three main pillars, all inherent to the ERCA itself:

- i) the commitment undertaken by Cabo Verde's authorities to adopt macroeconomic policies consistent with the regime;
- ii) the provision by the Portuguese Treasury of a short-term credit facility at concessional terms, for the reinforcement of Cabo Verde's foreign exchange reserves; and
- iii) the establishment of monitoring and technical support structures, composed of members of both countries' ministries of finance, ministries of foreign affairs and central banks.

After 20 years of ERCA functioning as envisaged, this article intends to present an analysis of the economic evolution of Cabo Verde in the light of the agreement's two main goals and to discuss some of the key challenges that lay ahead given the Cabo Verdean economy's structural characteristics. Macroeconomic performance points to the fulfillment of the established goals to a large extent. Monetary policy, mainly geared towards price stability, has proved credible, with inflation converging with euro area levels. As concerns the degree of openness, operations with non-residents increased, most notably with euro area countries. Regarding economic growth, though growth trajectories have started in the early 90's, average *per capita* income increased significantly in the decade that followed the agreement's signature, with Cabo Verde graduating from the UN's category of least developed countries (LDC) in December 2007.<sup>1</sup>

The future performance of Cabo Verde's economy depends on multiple factors. On the one hand, demographic change and higher average qualification levels should make a positive contribution towards a greater dynamism of economic activity. On the other hand, the economy faces a set of challenges to increase its growth potential. Structural reforms aimed at fostering investment (and consequently the capital stock) and increasing productivity levels are key to achieving higher sustainable welfare levels. Rising potential output would also help the budgetary consolidation process.

This article is organised as follows. In the first section some background considerations on the choice of exchange rate regimes are presented. The second section provides a description of the ERCA, its characteristics and goals. The third section analyses Cabo Verde's macroeconomic developments in the decade preceding ERCA's signature and in the two following decades, focusing on its goals. The fourth section discusses some of the Cabo Verdean economy's future challenges, namely demography and labour market, potential output and unemployment rate trend, for which estimates were computed. The article ends with some final considerations.

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1. Cabo Verde was the second country ever to graduate, followed by other three since then (the LDC category currently includes 47 countries).

## 2. Brief background on the choice of exchange rate regimes

One of the key elements considered when designing the ERCA was the empirical and theoretical debate over the choice of the appropriate exchange rate regime, especially intense at the time, following the financial crises that hit emerging market and developing economies (EMDE). It should be remembered that since the collapse of the Bretton Woods system, in the early 70's, countries are free to choose the most appropriate exchange rate regime according to their goals: fixed, float or intermediate.

Typically, fixed exchange rate regimes involve the adoption of a foreign currency (e.g. dollarization) or the establishment of an explicit legal commitment to tie the country's currency official exchange rate to another country's currency (e.g. US dollar or euro) or to a basket of foreign currencies (currency board). In floating regimes, a country's exchange rate is set by the supply and demand relative to other currencies. Intervention may exist in the foreign exchange market to balance unjustified changes in the exchange rate of an ad-hoc nature (managed float) or mostly exceptional (free float). Between these two extreme cases, there are several intermediate regimes that assume different levels of commitment in relation to maintaining the national currency's peg to the foreign currency(ies) chosen. The objective is to narrow exchange rate volatility of floating regimes and, at the same time, keep some room for manoeuvre to conduct economic policy when responding to shocks.

The preferred exchange rate regime, especially for EMDE, has been changing over the last three decades. In the early 90s, pegging to a reference currency (usually the US dollar or the German mark) was a frequent choice, aimed at macroeconomic stabilisation. In the late 90s, after crises in the balance of payments in several EMDE, intermediate regimes lost support because they are hard to manage and more crisis prone, especially in the context of growing financial integration. The prevailing view on the choice of exchange rate regime pointed to either a fixed or a floating regime. This bipolar prescription is based on the hypothesis that in an open economy with price rigidity and free movement of capital, authorities aren't able to simultaneously have a fixed exchange rate, free capital movement and an independent monetary policy – the impossible trinity or trilemma (see Cruz-Rodriguez (2013)).

Nevertheless, after the collapse of Argentina's currency board in 2002 and faced with the fact that excessive exchange rate volatility can have negative impacts on these economies (fear of floating), the adoption of the bipolar prescription by EMDE has been questioned (Ghosh and Ostry 2009). Since then empirical and theoretical literature's advice over the choice of exchange rate regimes states that there is no "one size fits all" solution, i.e. there are no simple and unique prescriptions: the choice differs from country to country and, even for a specific country, it may vary over time. In this context, the choice of the most appropriate exchange rate regime depends on national authorities' goals and policy priorities, on restrictions imposed by the economic structure and/or functioning and on the country's institutional and administrative capacity.

### 3. Main Features of the Exchange Rate Agreement between Portugal and Cabo Verde

The Exchange Rate Cooperation Agreement between Portugal and Cabo Verde (ERCA) was signed on March 13, 1998, by the members of Government in charge of the Finance portfolio in the two countries.<sup>2</sup> It envisaged two main goals. On the one hand, to promote macroeconomic and financial stability in Cabo Verde, mostly by annulling the link between currency devaluation and inflation. On the other hand, to advance the economy's openness and the expansion of economic and financial relations between Cabo Verde and three layers of external partners: Portugal, the countries that would become members of the euro area (EA) and the countries with currencies pegged to the euro.

The agreement was part of a strategy focused on the liberalisation, modernisation and openness of the Cabo Verdean economy, aiming for the "dynamic insertion of Cabo Verde into the global economic system".<sup>3</sup> This strategy, which included several structural reforms, had among its highlights a privatisation program, the partial conversion of domestic public debt and the promotion of foreign competition. The broad-based privatisation program mostly encompassed financial sector firms (banks and insurance companies), together with water and electricity utilities, among others of lesser significance. The domestic public debt conversion was to be pushed forward through the issuance of new securities (*Títulos Consolidados de Mobilização Financeira*, TCMF). Their income would be linked to the yield of an off-shore Trust Fund built up with privatisation receipts and foreign partners' grants. This conversion would eventually encompass over half the domestic public debt stock, thus relieving the Cabo Verdean Treasury of its servicing. Measures taken to promote competition included such highpoints as the liberalisation of edible goods imports and the removal of administrative barriers to current account flows, as well as, in part, capital flows.

The initiative of changing the exchange rate regime came from the authorities of Cabo Verde. They approached the Portuguese authorities for that purpose, which led to technical meetings that involved the central banks and the ministries of finance, ultimately resulting in the ERCA. The latter is based upon a fixed exchange rate between the currencies of Cabo Verde and Portugal (at first 0.55 CVE/PTE and, after the euro was launched, 110.265 CVE/EUR). This decision also reflected the Cabo Verdean authorities'

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2. This was the second experience of a peg between the currencies of Portugal and the Portuguese-speaking African countries following the latter's independences. The first had been the Monetary Arrangement between Portugal and Guinea-Bissau (1991/1996), which was not sustainably carried out but yielded important lessons (Saramago 2018). Later on, the Economic Cooperation Agreement between Portugal and São Tomé and Príncipe (ECA) was signed and has been functioning since 2009. It does not have the same explicit monetary and exchange rate dimension of the agreement with Cabo Verde, but it was inspired by the latter, and they are quite similar in their nature and functioning. Moreover, the ECA was set in parallel with a peg to the euro unilaterally established by the Santomean authorities (see, for instance, Saramago and Heitor (2015)).

3. See Governo de Cabo Verde (1997).

preference for a sort of exchange rate regime that was considered more suited to the structural features of Cabo Verde (Saramago 1998).

Among such features were, in particular, its condition as a small open economy (international trade in goods and services was 63.8% of GDP in 1993/1997), with a relatively narrow, rigid and little diversified production structure. It was, therefore, susceptible to the negative effects of currency devaluation (notably the pass-through effect on domestic prices) and unlikely to reap significant gains from a hypothetical positive impact of currency devaluation on external competitiveness. Another important feature was the high concentration of its relevant international transactions in Portugal and the future EA countries – either as partners in trade of goods and services or as the source of emigrant remittances, official development aid or foreign direct investment.<sup>4</sup>

Moreover, the financial system was relatively underdeveloped, in terms of sophistication, depth, diversity, or international connections. Such features, notwithstanding the progress achieved since the mid-1990s, might condition the potential benefits of opting for a flexible exchange rate regime, while at the same time curtailing the risks of going for a fixed exchange rate regime. Indeed, those features of the financial system might, on the one hand, hamper the exchange rate's effectiveness as a mechanism for adjustment. On the other hand, however, they might minimise the possibility of "speculative attacks" on the currency of Cabo Verde, along the lines seen in advanced or emerging market economies over the past few decades, in view of the limited significance, or absence, of financial markets and instruments.

The fixed currency peg is supported by three main pillars, set within the context of the agreement (as presented, for instance, in Saramago (2018)):

i) The first pillar was seen as the direct contribution of the Cabo Verdean party and it translated into a commitment to apply economic policy guidelines "compatible with the preservation of the exchange rate peg" – which meant preserving the macroeconomic foundations of the ERCA. This carried implications at several levels, as was then discussed. On the one hand, implications for monetary policy, which would need to be kept essentially aligned with the monetary policy stance adopted in Portugal and, after 1999, in the EA. At the same time, monetary policy would have to be even more focused on preserving international reserves, since their possible fall, if sizeable and sustained, would eventually imply the need for adjustments to the exchange rate. Concomitantly, among the functions of Banco de Cabo Verde, its main responsibility is to maintain price stability.<sup>5</sup>

On the other hand, as is also typical of fixed exchange rate regimes, the ERCA further carried implications for fiscal policy, which would have to refrain from deep

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4. Note, for instance, that Portugal represented 40.2% of Cabo Verde's international trade in goods and was the country of origin for 18.3% of Cabo Verdean emigrants' remittances between 1993 and 1997. Considering all the six future euro area members of greater relevance as partners of Cabo Verde (EA-6: France, Germany, Italy, Netherlands, Portugal and Spain), those figures were 61.6% and 60.3%, respectively, in the same period.

5. In article 17, number 1, of Banco de Cabo Verde's Organic Law, as published in Boletim Oficial (July 15, 2002).

and prolonged expansionism. Otherwise, that might lead to external imbalances which, sooner or later, would put pressure on international reserves and thus on the ability to sustain the currency peg. There was also an understanding that the ERCA would be relevant for macroprudential policy (although the term was not used at that time yet). Indeed, safeguarding the financial system's stability was considered critical, as a first line condition to ensure the good functioning of the new exchange rate regime – against a background of significant changes, such as the main financial institution's privatisation and the entry of foreign capital into the financial system. And, to conclude, implications for structural policies as well, inspired by the notion that it would be important to provide an appropriate degree of flexibility to the functioning of goods and factors' markets, in order to compensate for the relative rigidity intrinsic to a regime such as the one underpinned by the ERCA.

ii) The agreement's second pillar was regarded as the direct contribution of the Portuguese party and it meant the Portuguese Treasury would provide a credit facility of a concessional and short term nature, sizeable in volume for the Cabo Verdean context (Table 1).<sup>6</sup> It was aimed at supplementing foreign exchange reserves in case of need – defined as a fall of the central bank's net foreign assets below a threshold equal to three months of imports of goods and services. The facility was used every year until 2004<sup>7</sup>, after which international reserves remained above the threshold. It should be noted that the facility does not carry any obligation (of a monetary or financial nature) for intervention by Banco de Portugal or any other institution in the Eurosystem.

|                                              | 1998  | 1999 | 2000  |
|----------------------------------------------|-------|------|-------|
| CF in months of imports (goods and services) | 1.5   | 1.2  | 1.1   |
| CF as a % of GDP                             | 8.0   | 6.8  | 6.5   |
| CF as a % of BCV net foreign assets          | 141.9 | 75.8 | 120.3 |

TABLE 1. Credit facility | Context

Source: BCV.

Note: The maximum amount available under the credit facility (CF) is considered in every year (i.e. €45 million).

iii) The third pillar was understood to be a joint contribution of both parties and it translated into the creation of a structure to monitor and provide technical support to the agreement. It was composed of the ERCA Commission (ERCAC) and the Macroeconomic Surveillance Unit (MSU). Joining the two parties on equal terms, this

6. This facility amounted to PTE 5.5 billion (5.5 million contos), rising to PTE 9 billion (9 million contos) against a collateral; after 1999: €27.5 million, up to €45 million. As collateral, a transfer of foreign exchange reserves was required, amounting to 35% of the requested value. Each withdrawal was set at PTE 1 billion (1 million contos); after 1999: €5 million. At a minimum, 80% of the outstanding amount would have to be reimbursed by the end of each year and the remaining (up to 20%) by the end of January in the following year.

7. There were three withdrawals in both 1999 and 2000, in each case for the maximum individual amount set under the ACC (€5 million). In the other years of that period (1998 and 2001-2004), there was a single annual withdrawal. In the years of 2001-2004, the Cabo Verdean party used the possibility of reimbursing 20% of the outstanding amount only by the end of January in each of the subsequent years.

structure brings together representatives of their ministries of finance, central banks and (in the case of ERCAC) ministries of foreign affairs. It enjoys privileged access to policymakers and has the technical capability to regularly perform an economic and financial assessment of the relevant context for the ERCA's functioning, identifying weaknesses and risks.

Launching the ERCA was directly connected to other components of the broader strategy undertaken by the Cabo Verdean authorities. It was, for instance, presumed that by lessening currency risk (and, more generally, by eventually raising predictability and confidence), the agreement might contribute to attract more foreign capital to the privatisation process. It was further expected that the nominal stability presumably fostered by the agreement might represent an added factor of credibility, thus inducing foreign partners to support the Trust Fund which would underpin domestic debt conversion.

Perhaps even more significant was the fact that the ERCA tended to be seen as a way to provide real content to the engagement between Cabo Verde and the European Union, which the Cabo Verdean authorities were openly trying to promote<sup>8</sup> (see, for instance, Correia (2002)). This engagement in the monetary and exchange rate field was further regarded as especially urgent in view of the fact that, while preparatory bilateral discussions were taking place (in 1997/1998), a deep structural change was about to happen – the start of the third phase of the Economic and Monetary Union (EMU), i.e. the launching of the euro on January 1, 1999.

It was largely assumed, by the time technical meetings between Portuguese and Cabo Verdean delegations were taking place, that Portugal would be among the early adopters of the single currency (as was later confirmed by the Council of the EU, on May 3, 1998). That prospect was then perceived to have at least two implications: i) the bilateral establishment of an agreement along the lines of the ERCA would become more difficult (if not impossible) within the framework of EMU; ii) in turn, if such a bilateral agreement were to be already operational at the beginning of the euro, it could be expected that European structures would adopt some kind of formal framework to accommodate the link between the Cabo Verdean escudo and the future common currency, as the successor of the Portuguese escudo.

This perception was grounded on the notion that the ERCA might receive a similar treatment to what was being prepared in the cases of the two CFA francs and the Comorian franc<sup>9</sup> — all of which maintained (for quite some time by then) fixed exchange rates against the French franc. Such pegs were supported by agreements among the African countries using those currencies as legal tender and France, another prospective

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8. The disposition towards an engagement, which cut across the Cabo Verdean party-political spectrum, would lead to, among other relevant results, the "Special Partnership" agreed between Cabo Verde and the European Union in November 2007.

9. These are, respectively, the CFA franc issued by the Central Bank of Western African States and shared by the nine member states of the West African Economic and Monetary Union (WAEMU), the CFA franc issued by the Bank of Central African States and shared by five countries in Central Africa, and the national currency of the Comoros, an independent archipelago in the Indian Ocean.

founding member of EMU (see, for instance, ECB, 2006). And that was, indeed, what eventually happened. On December 21, 1998, the Council of the EU adopted a Decision which acknowledged the existence of the ERCA, involving a fixed exchange rate peg between the Cabo Verdean escudo and the euro. The agreement was kept on a bilateral basis but certain obligations of disclosure and consultation with the EU structures were introduced.

#### 4. Macroeconomic developments in Cabo Verde (1990-2018)

How the ERCA functioned over the two decades since it was launched may be assessed by considering macroeconomic developments throughout those years, as compared to the previous period, with a special focus on the agreement's two main goals: macroeconomic and financial stabilisation, and economic openness. It is, naturally, important to bear in mind that even though the exchange rate regime represents a significant element to analyse such developments, it is nevertheless part of a much wider context of influences (Table 2).<sup>10</sup>

##### 4.1. *Product and income*

Starting by how average income evolved in Cabo Verde, it becomes apparent that a fast pace of growth prevailed, starting before the ERCA, in 1993, and persisting until the global financial crisis of 2008. Over that period, real GDP *per capita* increased at an average annual rate of 5.5%, with some volatility but along a sustained trend (Figure 1a). Cabo Verde thus performed clearly better than two possible comparators: the whole of Emerging and Developing Countries (EDC: 3.4%) – within which emerging Asian countries tended to gain relevance – and, more pointedly, Sub-Saharan Africa (1.6%). Moreover, this performance of the Cabo Verdean economy took place against a background of significant population growth, at an average annual rate of around 1.7%.

This landscape changed significantly in the following decade, as real GDP *per capita* stagnated between 2008 and 2015, posting a recovery only in the three subsequent years<sup>11</sup>. The sizeable impact caused by the international financial crisis in Cabo Verde becomes therefore clear. Its growth path compares unfavourably with those of the two above mentioned comparators in the same period (2008/2015), and especially with the EDC, while being highly correlated with developments in the European economy (Figure 1b).

In the case of Cabo Verde, the crisis was felt mostly through the channels of tourism (gross receipts, at current prices, fell by 20.9% between 2007 and 2009, rising above the

10. This section benefitted from information contained in several reports of the two ERCA structures: the Macroeconomic Surveillance Unit (MSU) and the ERCA Commission (ERCAC), as well as in Banco de Portugal publications (namely “Evolução das Economias dos PALOP e de Timor-Leste”) and IMF reports (in the context of Article IV consultations or reviews of programs established with Cabo Verde).

11. Note that population growth was slower in that decade too, but even so it reached an annual average rate of about 1.2%.

|                                     | Units                    | 1993  | 1998  | 2003  | 2008   | 2013   | 2018   |
|-------------------------------------|--------------------------|-------|-------|-------|--------|--------|--------|
| <b>Output and prices</b>            |                          |       |       |       |        |        |        |
| Nominal GDP                         | CVE millions             | 34687 | 61679 | 92325 | 134698 | 153723 | 184661 |
| GDP <i>per capita</i>               | USD, PPP                 | 1046  | 1377  | 1937  | 3639   | 3559   | 3579   |
| Real GDP                            | Annual percentage change | 7.5   | 8.1   | 4.4   | 6.7    | 0.8    | 5.1    |
| GDP deflator                        | %                        | 11.4  | 3.3   | 5.7   | 3.5    | 1.4    | 1.5    |
| Inflation (annual average)          | %                        | 5.8   | 4.4   | 1.2   | 6.8    | 1.5    | 1.3    |
| Inflation (end of period)           | %                        | 4.4   | 8.4   | -2.3  | 6.6    | 0.1    | 1.0    |
| <b>External sector</b>              |                          |       |       |       |        |        |        |
| Current account                     | % of GDP                 | -5.7  | -9.4  | -10.2 | -13.7  | -5.9   | -4.8   |
| Capital account                     | % of GDP                 | 4.4   | 3.0   | 2.8   | 1.5    | 0.3    | 0.8    |
| Goods exports                       | % of GDP                 | 0.9   | 1.7   | 6.5   | 6.4    | 9.9    | 13.8   |
| Services exports                    | % of GDP                 | 6.9   | 13.7  | 24.9  | 33.2   | 35.5   | 35.7   |
| Tourism receipts                    | % of GDP                 | 1.9   | 3.2   | 10.5  | 18.8   | 21.7   | 23.9   |
| Goods imports                       | % of GDP                 | 35.7  | 36.3  | 44.3  | 48.9   | 43.5   | 48.6   |
| Services imports                    | % of GDP                 | 4.4   | 14.4  | 23.1  | 19.5   | 19.1   | 19.5   |
| Emigrants remittances               | % of GDP                 | 16.4  | 7.0   | 12.0  | 7.7    | 9.4    | 10.7   |
| Foreign direct investment           | % of GDP                 | 0.8   | 1.4   | 4.1   | 11.6   | 3.0    | 4.3    |
| Foreign exchange reserves           | Months of imports G&S    | 4.3   | 1.1   | 2.0   | 4.0    | 4.8    | 5.6    |
| <b>Public finances</b>              |                          |       |       |       |        |        |        |
| Overall balance                     | % of GDP                 | -8.0  | -3.3  | -3.5  | -2.1   | -9.3   | -2.7   |
| Total revenue                       | % of GDP                 | 32.5  | 27.4  | 23.9  | 28.7   | 24.5   | 28.2   |
| Tax revenue                         | % of GDP                 | 13.6  | 13.6  | 16.4  | 21.8   | 18.3   | 22.0   |
| Grants                              | % of GDP                 | 12.9  | 11.7  | 7.9   | 4.3    | 2.6    | 1.3    |
| Total expenditure                   | % of GDP                 | 40.4  | 30.8  | 27.4  | 30.8   | 33.8   | 30.9   |
| Investment                          | % of GDP                 | 23.8  | 13.5  | 8.8   | 9.2    | 10.8   | 4.3    |
| Public debt                         | % of GDP                 | 47.1  | 70.9  | 81.4  | 57.2   | 103.2  | 123.8  |
| External                            | % of GDP                 | 31.2  | 38.6  | 54.0  | 38.5   | 79.0   | 90.7   |
| Domestic                            | % of GDP                 | 15.9  | 32.3  | 27.4  | 18.6   | 24.2   | 33.1   |
| <b>Money and credit</b>             |                          |       |       |       |        |        |        |
| Net foreign assets                  | %                        | 4.3   | 0.1   | -1.7  | -2.1   | 7.5    | -2.2   |
| Of the central bank                 | %                        | -4.9  | -3.0  | -0.5  | 2.4    | 4.5    | 0.7    |
| Net domestic assets                 | %                        | 20.6  | 2.6   | 10.3  | 10.0   | 3.5    | 3.9    |
| Net claims on general government    | %                        | 7.8   | -0.1  | 1.5   | -1.6   | 2.0    | 0.5    |
| Credit to the economy               | %                        | -4.0  | 5.6   | 7.2   | 15.7   | 1.6    | 1.7    |
| Broad money                         | %                        | 24.9  | 2.7   | 8.6   | 7.9    | 11.0   | 1.7    |
| <b>Population and Labour market</b> |                          |       |       |       |        |        |        |
| Resident population                 | Thousands                | 369.0 | 417.3 | 460.1 | 491.7  | 520.1  | 553.3  |
| Unemployment rate                   | %                        | 26.0  | 24.0  | 20.0  | 13.0   | 16.4   | 12.2   |
| Employment                          | % total population       | 56.0  | 56.3  | 56.3  | 59.1   | 59.5   | 60.6   |
| Labour force (15-64)                | % total population       | 65.7  | 67.3  | 68.3  | 70.3   | 71.8   | 73.1   |

TABLE 2. Cabo Verde — Main economic indicators

Sources: BCV, Ministry of Finance of Cabo Verde, National Statistics Institute of Cabo Verde, IMF, World Bank.

Note: Values reported for Monetary Sector refer to changes as a percentage of initial M2.

previous peak, in nominal terms, only after 2011) and foreign direct investment (which had reached a peak amounting to 12.6% of GDP in 2007 and then fell almost every year, until the 3.0% of GDP recorded in 2013, recovering afterwards — Figure 9b ahead). This more recent improvement of economic prospects in Cabo Verde benefitted also from the European economy's performance.

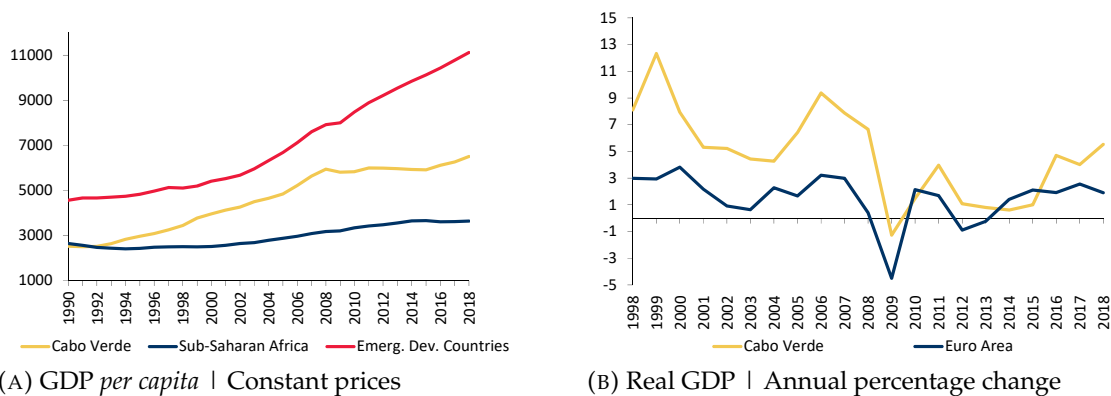


FIGURE 1: Gross Domestic Product

Sources: BCV, Eurostat and IMF.

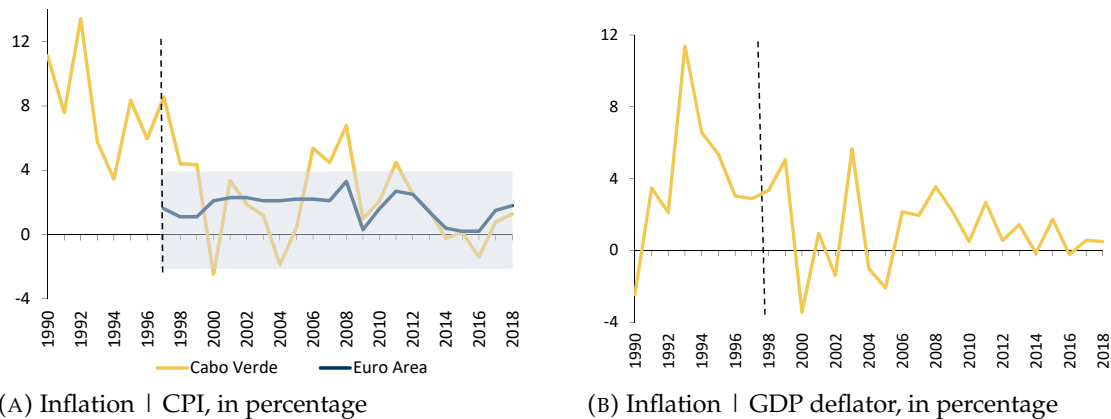
Note: GDP *per capita* is measured in International Dollars, 2011PPP.

FIGURE 2: Inflation

Sources: BCV, Eurostat and IMF.

Note: Inflation is measured by the average annual growth rate.

## 4.2. Macroeconomic and financial stability goal

### 4.2.1. Inflation

Moving on to an assessment of Cabo Verde's performance in terms of macroeconomic and financial stability, one should start by looking at price developments, bearing in mind that the ERCA's currency peg would provide an anchor to promote the convergence of inflation levels in Cabo Verde with the lower ones prevailing in the EA. Looking at either the average annual change in the CPI (Figure 2a) or the annual change in the GDP deflator (Figure 2b), there is a quite clear contrast between the period of 1990/1997 and that of 1998/2018. In the first case, average inflation (using the CPI) stood at 8.0%, having remained almost always above 4%, while in the second case average inflation fell to just 1.9%, displaying a fast and sharp fall right in 1999/2000.

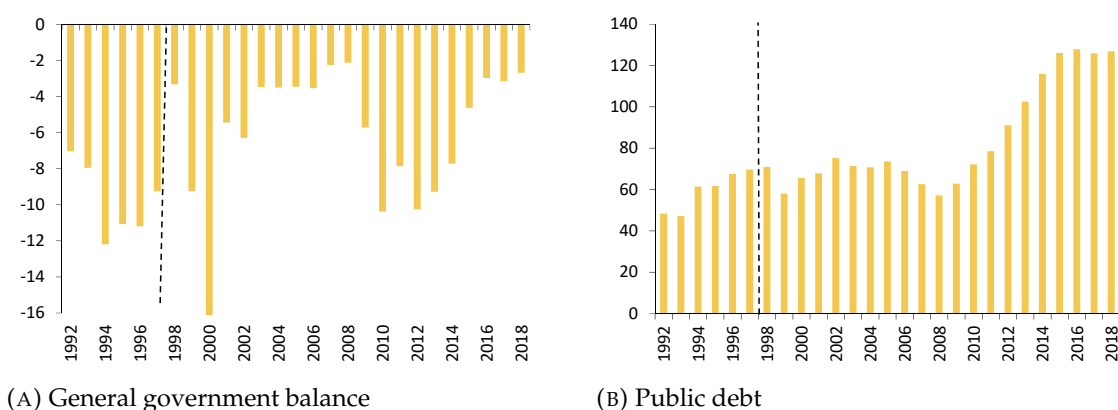


FIGURE 3: Public Finances

Sources: BCV, IMF and MF CV.

Note: Values as a percentage of GDP.

The pace was actually sustained from then on, in a consistent manner, with swings largely contained within a band of between -2% and 4%. There was just one more protracted rise above the upper threshold, in 2006/2008, of relatively low significance against the background of the whole period. There were also three spells of somewhat relevant negative inflation – in all cases linked to one-off shocks on the supply side (including good agricultural seasons, sectorial shifts favouring competition and changes in international prices of fuel, among others). The high level of convergence with the EA since the global crisis of 2008, in terms of CPI change, is also noteworthy.

#### 4.2.2. Public finances

The analysis of public finance developments is also particularly relevant as fiscal policy matters in a fixed exchange rate regime and specifically in the context of Cabo Verde. In fact, the connection between fiscal and external imbalances may impact the foreign reserves level and the ERCA's sustainability itself. Since the signature of the agreement, two periods of high general government deficits with subsequent adjustments may be highlighted: in 1999/2000 and in 2009/2014 the general government deficit as a percentage of GDP has increased declining afterwards in both cases (Figure 3a). The first episode was related to the State assumption of SOE's liabilities in the context of their privatization<sup>12</sup> and to three exogenous factors to be mentioned: an exceptional drought period leading to the increase of social support expenditure; the USD appreciation *vis-à-vis* the Euro, implying an higher interest expenditure on the USD denominated debt; and the high international oil price translated into larger costs with subsidies to contain the domestic energy prices.

12. Note that the criteria for the treatment of SOE's debt assumptions in 2000, i.e. recorded as expenditure in national accounting, with an impact on the deficit, contrasts with the methodological treatment followed in the subsequent years.

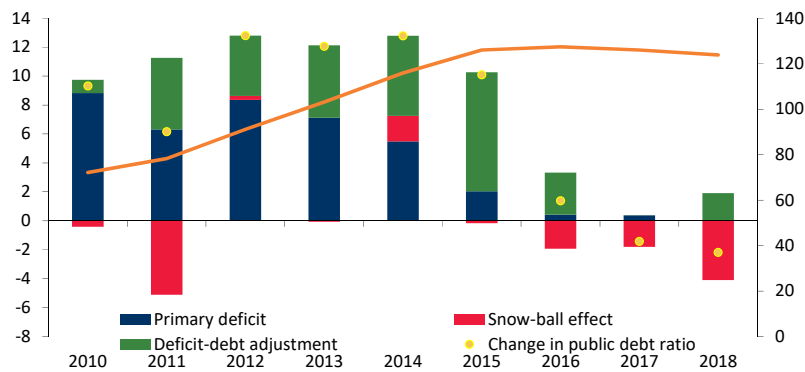


FIGURE 4: Public debt dynamics

Sources: BCV and authors' calculations.

Note: Values in percentage and percentage points of GDP.

However, this deficit increase did not mirror on the public debt ratio as the privatizations receipts were used to reduce the public debt (Figure 3b).<sup>13</sup>

In the second episode, that took place in 2009/2014, fiscal imbalances amplified, with an average general government deficit of 8.5% of GDP (with a peak of 10.5% in 2010) and the public debt ratio doubling from 57.2% of GDP in 2008 to 115.9% in 2014. These developments reflected the impact of the global financial crisis both directly (via drop in tourism revenues, for instance) and indirectly with the offsetting measures implemented by the Cabo Verde's authorities. In fact, the authorities adopted a package of stimulus measures aiming at mitigating the crisis impact on the economic activity and employment. By analysing the evolution of indicators like real GDP, GDP *per capita* or unemployment rate, this stimulus did not provide the aimed results. In contrast, the impact of this package was quite visible in the public accounts, notably in the public debt ratio, that showed an upwards trend until 2016 and remains in levels close to, but still above, 120% of GDP in the recent years (Figure 4).

A more detailed analysis shows that other factors beyond deficit have conditioned the public debt developments throughout this period. To this end, the change of public debt as a ratio of GDP ( $\Delta b_t$ ) in each year may be decomposed as: i) the "snow-ball effect" i.e. the difference between the debt implicit interest rate ( $iir_t$ ) and the GDP nominal growth rate ( $g_t$ ), multiplied by the previous year's debt as a ratio of GDP ( $b_{t-1}$ ); ii) the symmetric of primary balance as a percentage of GDP ( $pb_t$ ); and iii) deficit-debt adjustments as a ratio of GDP ( $dda_t$ ).<sup>14</sup>

$$\Delta b_t = \frac{iir_t - g_t}{1 + g_t} b_{t-1} - pb_t + dda_t$$

Based on this decomposition, one may find three main factors for the evolution of the public debt ratio in the last decade: i) the primary deficits accumulation explains,

13. In this article, the public debt concept excludes the "Títulos Consolidados de Mobilização Financeira".

14. The derivation of this decomposition may be found, for instance, in Amador *et al.* (2016).

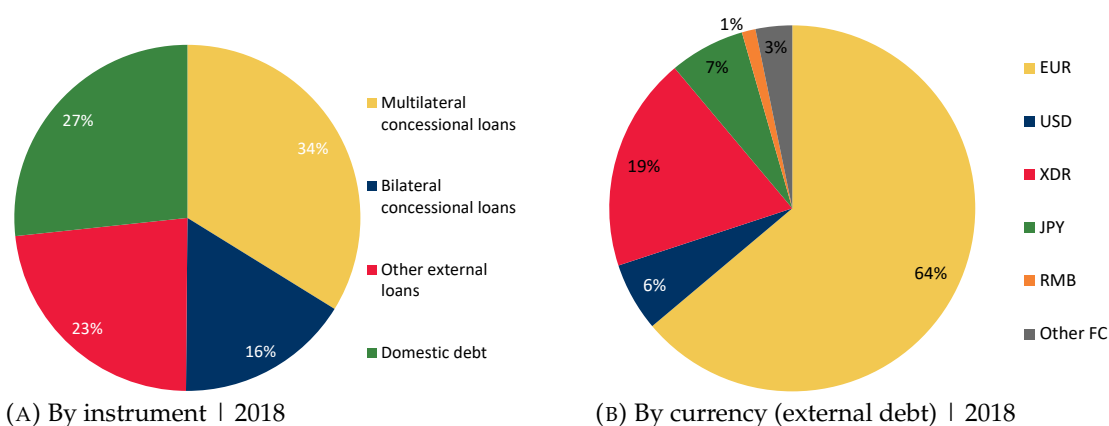


FIGURE 5: Public debt structure

Source: BCV.

Note: The values are in percentage of total.

at a large extent, the steep trend in the debt ratio up to 2014, only mitigated in 2011 by the macroeconomic performance; ii) the deficit-debt adjustments provided a significant contribution between 2011 and 2015, which has declined in the three following years. Two thirds of these adjustments refer to financing operations to State owned companies (SOE) through capital increases (not included in the general government balance) and on-lending operations which amounted to 23% of GDP in accumulated values from 2010 to 2018. Other factors impacting on public debt but not on the deficit as the exchange rate Euro/CVE depreciation in 2014 and 2015 had only a minor contribution to this item; iii) since 2016, the acceleration of economic growth along with budget consolidation measures carried out since 2014 have contributed favourably to the debt's dynamic given the positive differential between the GDP nominal growth rate and the implicit interest rate.

Analysing the Cabo Verde public debt structure at the end of 2018, some characteristics may be highlighted. By instrument, external concessional loans (multilateral and bilateral) represent half of the debt, and are typically long-term loans with low interest rates (around 1%) (Figure 5a).<sup>15</sup> Other external loans have contractual interest rates around 2%. Only the domestic debt issued in CVE has associated higher interest rates close to 5%. Breaking-down the external public debt by currency, about two thirds of the debt is denominated in Euro which, given the exchange rate agreement in place, narrows significantly the exchange rate risk exposure (Figure 5b). Additionally, almost 20% of the external debt is denominated in Special drawing rights (currency code XDR), and the Euro weighs close to 31% in this basket.

15. As Cabo Verde graduated from Least developed country status at the end of 2007, the concession of grants or concessional loans by external partners has been declining since then. The current concessional profile of the external debt is not so favourable as in the pre-2008 period but this effect has been mitigated by the lower interest rates global environment.

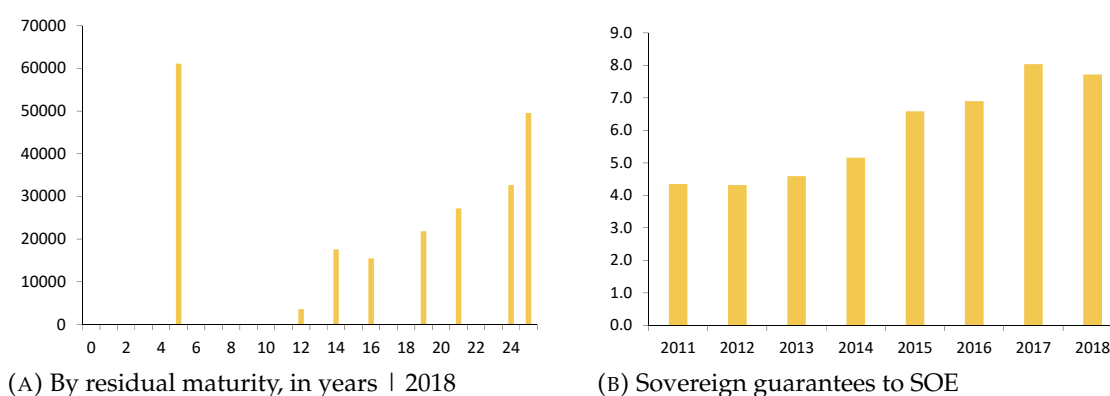


FIGURE 6: Public debt

Sources: BCV and authors' calculations.

Notes: public debt by residual maturity is in CVE millions. Sovereign guarantees to SOE as a percentage of GDP.

Decomposing by residual maturity, one may find a high average maturity and relatively distended from 2030 onwards. (Figure 6a). In the medium-term, a significant borrowing requirement is envisaged for 2023 corresponding to domestic loans denominated in CVE, which were already contracted with a high interest rate.

The evolution of contingent liabilities deserves to be observed as well. The sovereign guarantees to SOE's debt have exhibited an upwards trend, from about 4.5% of GDP in the early 2010 decade to around 8% of GDP in the last couple of years (Figure 6b).

Summing up, excluding the two periods of larger budget imbalances (1999/2000 and 2009/2014), associated as well to larger external imbalances, public accounts have revealed a relatively favourable performance since the signature of the ERCA. In fact, the years between 1992 and 1997 had witnessed considerable deficits of 9.8% of GDP on average. By contrast, the periods from 2000 to 2008 and since 2015 were marked by expressive budget consolidation processes, built both on revenues expansion associated to the economic recovery and, at some extent, on expenses control and improvements in the quality of expenditure.

Recent indicators on the institutional structure and governance confirm the rather favourable external perception of Cabo Verde. In particular, in the World Bank Governance Indicators (WGI) for 1996-2018 available for more than 200 countries, Cabo Verde position is around percentile 75 in the dimensions "voice and accountability", control of corruption and policy stability/absence of violence and terrorism and close to median in general government effectiveness and regulation quality. In the public sector Corruption Perception Index (CPI) compiled by Transparency International, Cabo Verde stays in the first quartile in 2019 (position 41 in 180 countries).<sup>16</sup>

16. World Bank (2019) and Transparency International (2020). The ranking for each indicator varies between 0 (lowest position) and 100 (highest position). Higher values correspond, in the case of WGI, to better governance, and in the case of CPI to a higher corruption perception level.

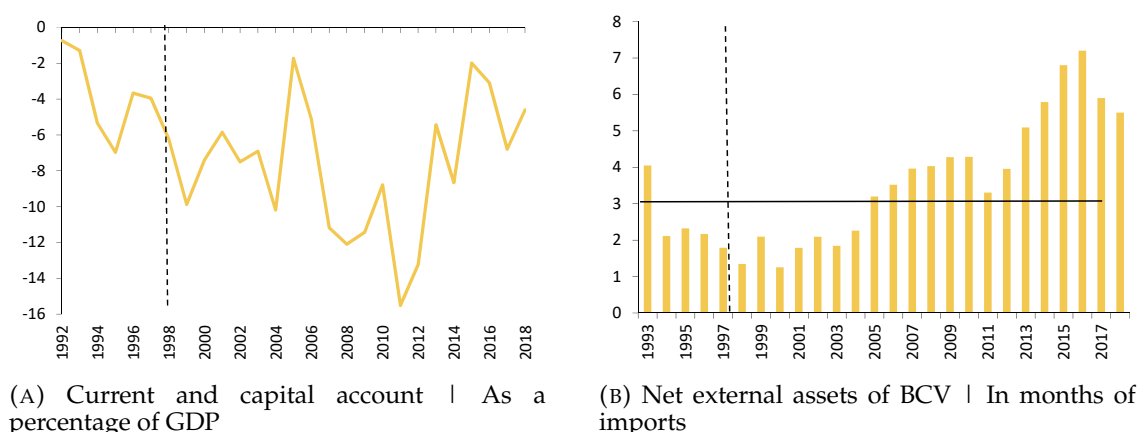


FIGURE 7: External accounts

Source: BCV.

### 4.2.3. External accounts

As regards external accounts, a noteworthy feature is how the current and capital account deficit remained relatively high, as a percentage of GDP, for an extended period (Figure 7a). Among other reasons, this can notably be explained by the availability of external financing on favourable terms, in the shape of either foreign direct investment (Figure 9) or loans, namely to the public sector, on mostly concessional terms (which is to say, better than market terms).

Moreover, it is important to be aware of the structural change noticeable in the current and capital account, especially on the credit side (Figure 8a). The most remarkable fact is the growth of gross tourism receipts: amounting to no more than 2.5% of GDP in 1997, they leapt to 22.1% of GDP merely a decade afterwards.<sup>17</sup> They then took a toll from the global financial crisis, but would eventually reach a new peak in 2018 (24.0% of GDP).

In turn, emigrant remittances, still the major source of foreign currency in the 1990s (11.3% of GDP in 1996/1998), lost some ground over the following decade (8.7% in 2006/2008). They nevertheless recovered in more recent years, a trend that may be related to factors such as the economic recovery in the main countries of destination for Cabo Verdean emigrants and the falling yields on low risk savings in advanced economies since the global financial crisis. Lastly, official transfers (current and capital) – meaning official development assistance, in the shape of grants – lost relative

17. It is worth to notice that the tourism activity has a significant import content (given the narrow production basis of the Cabo Verdean economy vis-à-vis the tourism related demand). Therefore net increase of tourism receipts would be lower (although difficult to quantify as imports are not broken down by sectorial destination). An additional indicator of the growing importance of tourism in the Cabo Verdean economy is the GVA developments in tourism related sectors (accommodation and restaurants): it grew from 1.4% of GDP (average 1996/1998) to 6.3% of GDP (average 2016/2018).

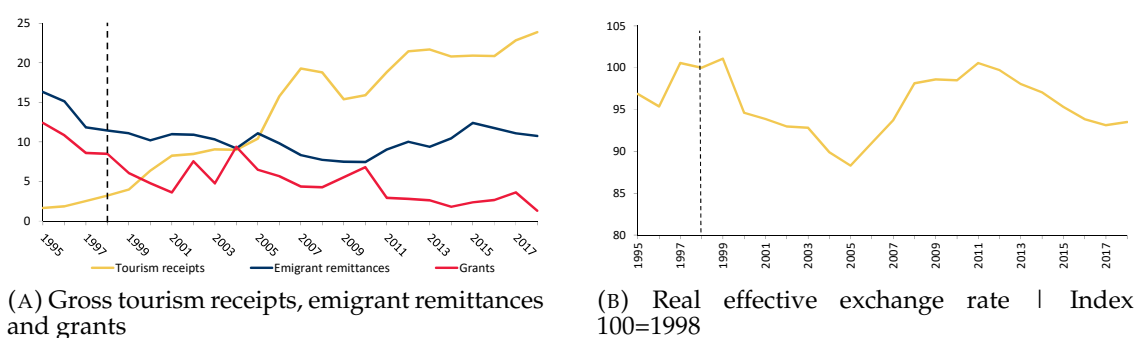


FIGURE 8: Current account inflows and effective exchange rate

Sources: BCV, MF of Cabo Verde and INE of Cabo Verde.

Notes: Values in figure 8A are shown as a percentage of GDP. Tourism receipts correspond to gross values; the real exchange rate indicator was calculated by UAM using the bilateral rates for Cabo Verde's four main trading partners, weighed by their share in total trade of goods and deflated by their CPIs.

significance in a much sharper way, reflecting broad socioeconomic developments in Cabo Verde.

In order to better assess the soundness of Cabo Verde's external accounts, it is further necessary to look at how foreign exchange reserves evolved. Considering the BCV's net external assets, in months of imports of goods and services (Figure 7b), it becomes apparent that a downward trend prevailed in the first years after the agreement was introduced – reflecting an early adaptation process and the exogenous shocks mentioned in the context of public finances. In turn, from 2003 onwards this indicator strengthened almost continuously, except for the global crisis years, reaching a peak in 2016 (7.2 months of imports).

Still in the context of macroeconomic and financial stability, a final indicator of relevance is the real effective exchange rate of the Cabo Verdean escudo (Figure 8b) through which developments regarding price-competitiveness in the economy of Cabo Verde may be assessed. One of the main risks associated with fixed exchange rate regimes is, of course, the possibility that a relevant loss of price-competitiveness may occur as a result of gaps between domestic inflation and that of foreign partners. The risk increases with the size and persistence of such gaps, although one should bear in mind that overall competitiveness carries a non-price component too.

After some slight real appreciation, right in 1999, a period of six years followed, during which real depreciation tended to be continuous and sizeable. That gain in price-competitiveness would then diminish progressively, and it got totally wiped out by 2012, mostly as a result of higher inflation in Cabo Verde and the initial impact of the global financial crisis. It turn, the past seven years saw a return to the previous trend, of gradual CVE depreciation in real terms (an overall change of 7.0% between 1998 and 2018). It is therefore clear, according to the available indicator, that the euro peg regime did not imply a loss of price-competitiveness to the Cabo Verdean economy, taking into account the entire period since it became operational.

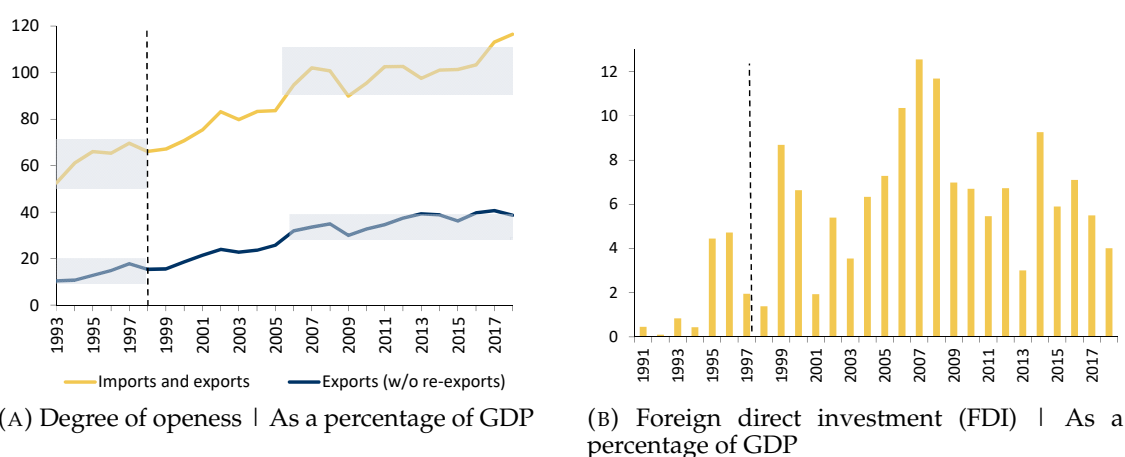


FIGURE 9: Degree of openness and foreign direct investment

Source: BCV.

Notes: The degree of openness is measured by the level of external trade in goods and services. FDI comprises net inflows.

### 4.3. Economic openness goal

As regards the ERCA's second key goal – to promote greater openness in the Cabo Verdean economy and to foster its connections with the EA – it is important to start by identifying the rationale that underpins it: the lower uncertainty and higher confidence that were thought to result from abating currency risk towards the EA, which was by then already dominant in the context of Cabo Verde's economic relations with the rest of the world.

Considering the sum of exports and imports of goods and services as a percentage of GDP, a few results become apparent (Figure 9a). Following a period of relative stabilisation in 1995/1998, when it stood at around 65-70% of GDP, that indicator embarked on a sharp rising trend, clearing 100% of GDP about a decade afterwards. It then fell twice in the following years, which may be related to the initial impact of the global financial crisis and the beginning of the fiscal consolidation process. Nevertheless, it is clear that the degree of openness reached an all-time high in 2018 (116.4% of GDP) and has settled around 100% in the last decade (moving beyond that threshold in the past couple of years), in sharp contrast with the figures for 1993/1998.

This reasoning can be essentially replicated in case only exports of goods and services are considered – or rather, the trend appears to be sharper still. Actually, exports of goods and services more than doubled, as a percentage of GDP, since the ERCA was launched: starting at less than 18% of GDP before 1998, they would reach a peak of 40.6% of GDP in 2017. Indeed, the ratio of exports to imports evolved quite favourably: from an average of 28.1% of GDP in 1993/1998 to an average of 71.5% in 2013/2018 (peaking at 72.8% in 2018). It is therefore clear that the Cabo Verdean economy does not appear to have endured any loss of competitiveness, as regards its external trade, in the two decades since the ERCA came into force.

Still in the context of the external openness goal, it is important to take a look at foreign direct investment (FDI), comparing its performance before and after the ERCA was signed (Figure 9b). The underlying idea is that this sort of financing is especially sensitive to the level of confidence assigned by foreign investors to the destination economy's prospects (in this case, the Cabo Verdean one). And also the notion that an exchange rate framework such as the ERCA's might be regarded as an additional element of confidence, if it got to be credible.

The performance of FDI is actually quite suggestive: in the years between 1991 and 1998, it rose above 2% of GDP only twice. In turn, annual FDI fell below that threshold only once in the following couple of decades – and that happened in 2001, in the aftermath of the above mentioned critical phase. From 2002 until the global financial crisis, a consistent rise prevailed, with a peak in 2007 (12.6% of GDP). Even after 2009, FDI remained relatively robust (an average of 6.1% in the years between 2009 and 2018). It may thus be ascertained that FDI recorded a sizeable and permanent rise, as a percentage of GDP, in the period following the ERCA's introduction, broken only in times of international recession.

Moreover, it is relevant to consider how the weight of euro area countries in the context of Cabo Verde's external transactions evolved after the ERCA was signed. For the sake of clarity and data availability, exports (excluding re-exports) and imports of goods are considered, divided into three main groups: Portugal, the other five countries forming with Portugal the so-called EA-6 group (meaning the six euro area countries of greater significance in the context of Cabo Verde's external trade: Portugal, Spain, Italy, the Netherlands, France and Germany – in declining order of importance at the series' final year), and finally all the other foreign partners of Cabo Verde.

Even before the agreement was signed, Portugal was gaining ground since the beginning of the 1990s, from around 33-35% of total trade in 1991/1994 to 44.6% in 1997. That was decisive in pushing the whole of EA-6 countries beyond 60% of total trade in 1996/1998 (Figure 10). In the course of the next couple of decades, Portugal's weight never fell below 40%, having started by rising even higher (up to a peak of 56.2% in 2002) and tending to fall slightly afterwards – against the background of a growing presence of emerging countries such as China.

In turn, the five other EA-6 countries gained relevance until the global financial crisis (as the whole of EA-6 reached a peak of 85.3% in 2010, lower only than the all-time high of 2002: 86.5% of total trade – but, in the latter case, mostly due to Portugal). In a nutshell, the weight of EA-6 countries increased from an already noteworthy level of 59.7%, on average, in 1990/1997 to the rather more robust figure of 74%, on average, in the last few years (2012/2018), after remaining consistently above 80% in the period 2007/2011.

From the assessed indicators, it can be concluded that the Cabo Verdean economy was already on a path of rising openness since the beginning of the 1990s. Nevertheless, from the final years of that decade onwards, there was still a significant stepping-up in transactions with non-residents, especially those from euro area countries, as regards both current and capital flows (namely FDI, in the latter case).

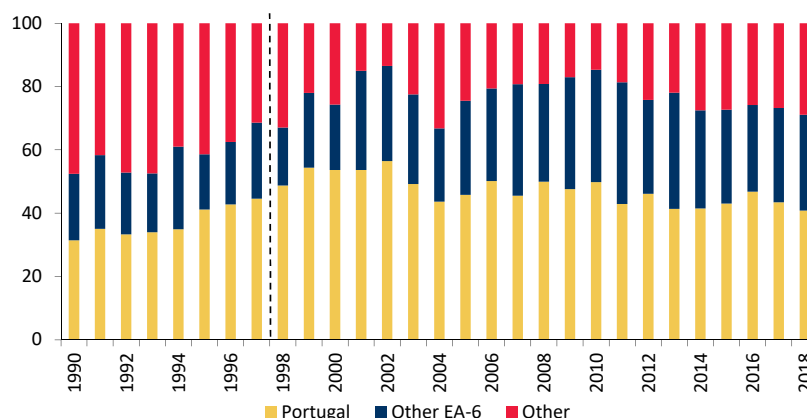


FIGURE 10: External trade, breakdown by countries

Source: BCV.

Notes: Data refers to exports (excluding re-exports) and imports of goods. EA-6 aggregate includes Germany, France, Spain, Italy, Netherlands and Portugal.

#### 4.4. Key findings

Seeking to assess the impact that ERCA may have caused in the Cabo Verdean economy, the following points may be highlighted, as regards how the agreement functioned and how the economy broadly performed in the years 1998/2018 – see also Saramago (2018):

i) The exchange rate between the Portuguese and Cabo Verdean currencies remained unchanged since its initial fixing in the context of the agreement. As should be the case to safeguard confidence under this kind of exchange rate regime, preserving its effectiveness. It can thus be inferred that the existence and functioning of the ERCA never led to pressures so unbearable that an adjustment to the peg would become inevitable.

ii) The real effective exchange rate of the CVE appreciated only twice, in annual terms, against its level of 1998. Moreover, such phases were relatively mild and short-lived. For the whole period, the REER depreciated by 7.0%. Price-competitiveness, in as much as it can be ascertained through this indicator, was therefore preserved, avoiding one of the main pitfalls associated with this sort of exchange rate regime.

iii) The ERCA's credit facility was regularly used, in sizeable amounts, between 1998 and 2004, supplementing the Cabo Verdean foreign exchange reserves, as foreseen in the agreement. Since then, as the economy evolved, BCV net external assets remained above the threshold established under the ERCA as a condition of need.

iv) The technical structures created, on an even basis, to promote the agreement's functioning regularly carried out their responsibilities of macroeconomic monitoring. They thus analysed the ERCA's performance in the economic context of Cabo Verde, involving bilateral debates and the signaling of weaknesses and risks.

v) Inflation in the Cabo Verdean economy subsided consistently after the agreement was introduced. It thus converged with EA levels, in line with the first of the two major goals envisaged by the ERCA.

vi) External trade and foreign direct investment indicators show a significant increase in the openness of the Cabo Verdean economy to the outside world, which is in line with the second of those major goals.

## 5. Structural features and challenges of the Cabo Verde economy

### 5.1. *Demography and labour market*

Cabo Verde is a small lower middle-income economy<sup>18</sup> recording about 550 thousand inhabitants in 2018 but with a very young and increasing population. According to the latest Census, of 2010, when the resident population attained the half million, more than half of the residents were less than 25 years-old. The demographic pyramid notably shows the high density of the population in the youngest cohorts (Figure 11a). The young-age dependency ratio was about 50% and the old-age dependency ratio around 10%.<sup>19</sup> These figures contrast with the demographic structure of the European countries, including Portugal, where these ratios were 20 and 33%, respectively.

Since 2010 the resident population has been increasing by about 6,500 individuals each year, a lower growth than the one recorded in the decades prior to the crisis, but still a significant progression (corresponding to an average annual growth rate of about 1.2% - Figure 11b).

Note that the demographic developments mirror not only increases in the average life expectancy but mainly the still high fertility rates although diminishing. In fact, according to the results of the survey carried out by the INE and the Ministry of Health and Social Security (IDSR-III), the total fertility rate has declined from 2.9 in 2005 to 2.5 in 2018. Migration flows should have attenuated demographic growth via emigration, that has a historical tradition in Cabo Verde.<sup>20</sup> On the other hand, immigration has been increasing since the 1990s. Foreign population accounted for about 4% of total resident population in 2010 (3.2% in 2014).

The ongoing process of demographic transition initiated with the declining fertility rates is embedded in INE's demographic projections that point to a slightly lower growth of the population up to 2030. The projected annual growth rate is close to 1%, leading to 620 thousand individuals at the end of the horizon. The young-age dependency ratio is expected to drop to about 35% while the old-age dependency ratio

18. According to the World Bank classification. For purposes of the 2019's update, this classification applies to countries where the Gross Domestic Income *per capita* ranges between 1,026 and 3,995 USD.

19. The young-age dependency ratio corresponds to the weight of population younger than 15 over working-age population (ages 15 to 64), while the old-age dependency ratio corresponds to population older than 64 over working-age population.

20. INE CV has estimated about 16,500 individuals that had emigrated between 2009 and 2014, in particular young people that left to study abroad, and around 53% of the total moved to Portugal, followed by USA and France (Instituto Nacional de Estatística de Cabo Verde (2014, 2015)). To be referred that in 2018 about 34,660 individuals of Cabo Verdean nationality were resident in Portugal (Serviço de Estrangeiros e Fronteiras (2019)), which is equivalent to 6% of the total resident population in Cabo Verde in the same year.



FIGURE 11: Population and distribution by age and gender

Source: INE CV (Censos 2010).

Note: Data for population is in number of resident individuals.

is projected to increase moderately to 12.5%. Overall, the total dependency rate should decline by then.

The increase of the working-age population and the higher labour market participation rates, notably female one, should continue to foster labour supply. In 2010, women's participation rate was about 56%, 15 percentage points below men's participation rate. However, until 2017, female participation rate grew above the male one (18.5% and 15.9% respectively). The unemployment rate has stood relatively high in the last decade (around 14%), but without relevant gender gaps. At this stage it should be noted that the informal sector is important in the economy of Cabo Verde, although this economy presents one of the lowest informality levels in the context of Sub-Saharan Africa. Declared employment is heavily concentrated in the services sector and, at lesser extent, in agriculture and fishing. This implies increased uncertainty in the statistical compilation of the labour market main variables. In any case, higher educational levels should allow for a more qualified labour force. In 2010 the increase of educational attainment levels was already quite evident in particular in the case of women (Figure 12b). This entails a significant increase in future average qualifications of the Cabo Verdean labour force.

## 5.2. Potential output and trend unemployment rate

The economic performance of Cabo Verde, like other economies, can be evaluated using unobserved variables, namely potential output and the unemployment rate trend component. The analysis of potential output level and growth rate adds information on the cyclical position of the economy and its sustainable growth.

Potential output is an unobserved variable that depends, among other factors, on the model that is used to estimate it. Duarte *et al.* (2019) suggest that the sign of the output gap is also conditional on the sample period and on the specifications of the unobserved

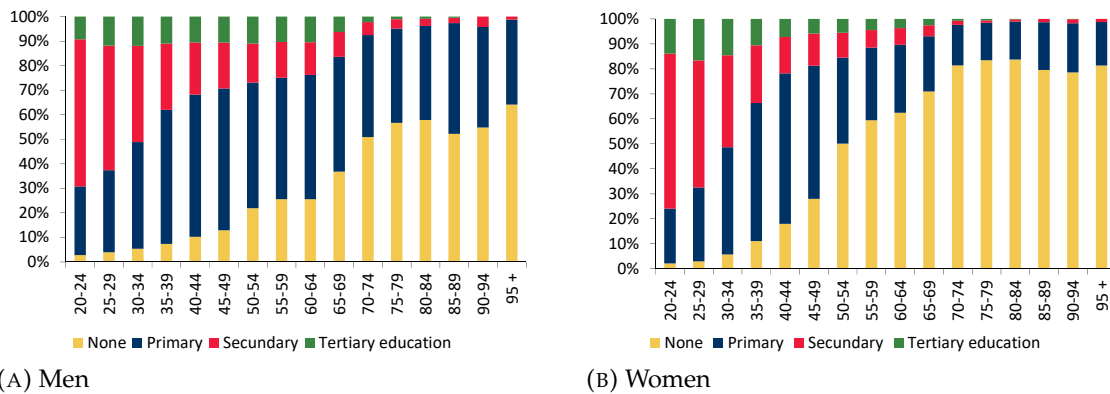


FIGURE 12: Distribution of population by educational attainment level in 2010 | In percentage  
Source: INE CV (Censos 2010).

Note: Data refers to men and women aged 20 and over.

variables. Therefore it is prudent to use several methods to evaluate the cyclical position of the economy and to evaluate a comprehensive set of economic variables.

Potential output estimates in this article are based on a model of unobserved components in which GDP, the unemployment rate and inflation are decomposed in unobserved trend and cycle components. This model includes a Phillips Curve (relationship between inflation gap and output gap) and an Okun Law (relationship between output gap and unemployment gap). The model was estimated using annual data from 1980 to 2018 and IMF estimate for 2019, assuming three hypotheses for the specification of the unobserved components.

Firstly, it was considered that trend components are not influenced ex-ante by any observed data (designated “Free model”). Secondly, it was considered that the estimates for unobserved variables are partially influenced by low frequency movements, which are based on Hodrick-Prescott (HP filters) with smoothing coefficients equal to 100 (“100 model”) and 6.25 (“6.25 model”).<sup>21</sup>

The results suggest that the potential output of Cabo Verde’s economy presented a deceleration trajectory since late 1990s, recording presently a growth rate around 3.5% (the estimates of the different models point to an interval of growth rates between 2.9% and 4.5%), which compares with an average of 5.3% in 1990 (Figure 13a). It is worth mentioning that in the Free model the estimated trend is close to the one of a HP filter with a smoothing coefficient of 100.

The deceleration of potential output occurred simultaneously with a reduction in trend inflation, measured by the growth rate of the GDP deflator, to values around 1.2% (average of 5.6% in 1990 and of 2.4% in the end of 1990s) (Figure 13b), while the trend unemployment rate reduced from values around 19% to around 13% (Figure 14a). In the case of the unemployment rate trend component, the Free model only suggests

21. UA smoothing coefficient equal to 6.25 is nearly equivalent to a smoothing coefficient of 1,600 when working with quarterly data (see Ravn and Uhlig (2002)). Estimation details can be found in the Appendix.

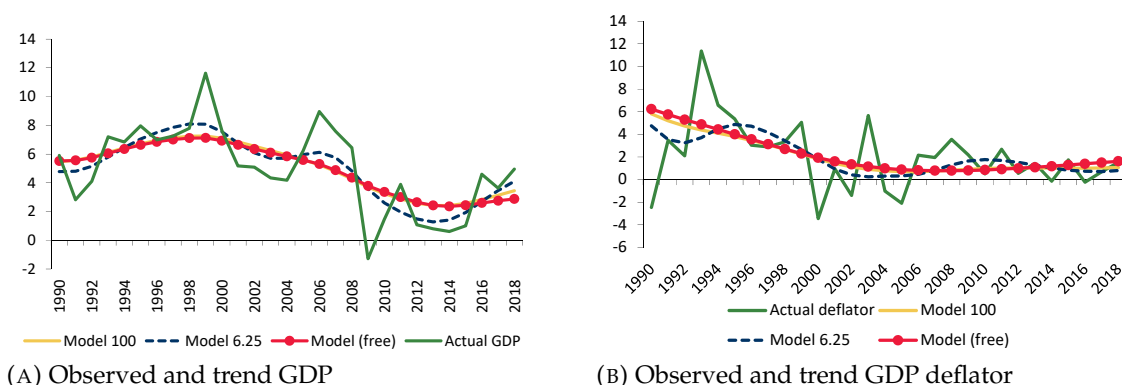


FIGURE 13: Observed and trend variables | In percentage

Source: BCV and authors' calculations.

Note: Values correspond to annual changes.

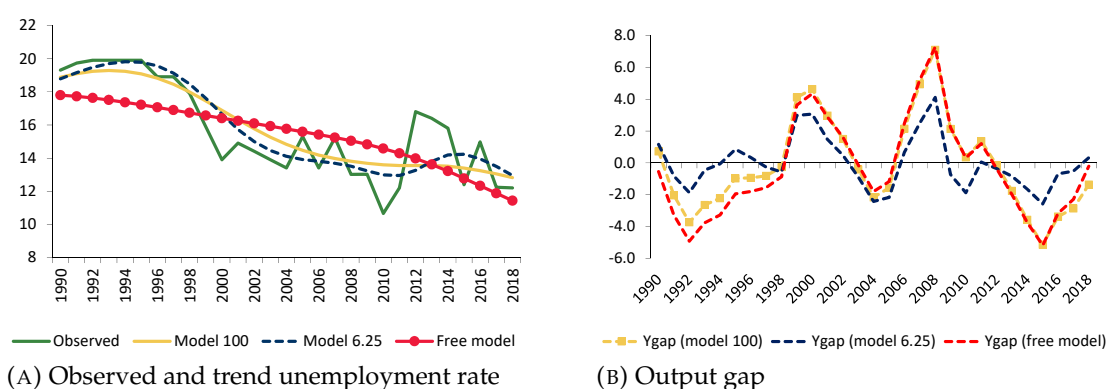


FIGURE 14: Labour and product markets

Source: BCV and authors' calculations.

Notes: Unemployment rate is in percentage of active population. Output gap is in percentage of observed GDP.

a decreasing path. In this context, it should be mentioned that the importance of the informal sector in Cabo Verde creates statistical challenges to assess labour market variables and, in particular, historical unemployment rates in distant years. Since 2009, labour market statistics are produced by the National Statistics Institute of Cabo Verde, based on the recommendations of the Resolution of the 13th International Conference of Labour Statistics of the *Bureau International du Travail*, being statistically compatible since 2006.

Output gap estimates (ygap) obtained through the different model parameterizations share some characteristics. Among them, it does stand out that estimates for 2008 systematically correspond to the highest levels (Figure 14b). For the most recent period, estimates suggest that output gaps are closer to zero, after a convergence movement that started in 2015 (from negative output gaps between -2.5% and -5.0%).

It is worth mentioning that these estimates present nevertheless some dispersion, which is a sign of the uncertainty associated to the calculation of these indicators. Between 1990 and 1998, for example, alternative parameterizations give rise to very distinct signs and amplitudes, which highlight the necessity to complement the analysis of the cyclical position of the Cabo Verde's economy with auxiliary information. On the other hand, the output gaps of the Free model and of the 100 model are relatively close, but their relation with the observed unemployment and associated trend values is considerably different (Figure 14a).

Despite the uncertainty, results show decreasing trends in the inflation rate and in the unemployment rate, while potential GDP, although depicting a robust growth in recent years, is below the estimate for the period before the international financial crisis.

In this context, initiatives like the *Plano Estratégico de Desenvolvimento Sustentável* (PEDS) 2017–2021 that Cabo Verdean authorities implemented, aiming to promote economic growth, improve living conditions and public debt sustainability, are particularly relevant.<sup>22</sup> The proposed growth model is based on the promotion of private investment, through the increase of confidence levels and reduction of economic costs, complemented by social and solidarity policies. Among the planned reforms, it is worth mentioning the ones in the financial area, like the reinforcement of supervision, the improvement in the central balance sheet database, credit register and collateral register databases, and also the implementation of recommendations regarding anti money laundering and terrorist financing.

PEDS includes also reforms regarding the improvement of the business environment to support the private sector development, establishing a "financing ecosystem" (which includes guarantees, risk capital and support to project development), and the simplification of procedures to create enterprises. Nevertheless, its timely implementation and close monitoring is crucial to the plan's success.

The approval, in July 2019, of the IMF's Policy Coordination Instrument (PCI), in place for 18 months, i.e. until January 2021, is an important additional tool. The IMF will ensure technical support in order to enhance macroeconomic stability through budgetary consolidation and to promote structural reforms. The budgetary program is based on the improvement of primary balances and ending, in time, with State transfers to public enterprises which run deficits, while a restructuring program takes place, namely through privatizations and licensing of some services. The PCI does not include IMF financial support but, according to the IMF evaluation, the successful conclusion of half-yearly reviews will help signal the commitment of Cabo Verde's authorities in the prosecution of structural reforms.<sup>23</sup>

22. See Ministério das Finanças de Cabo Verde (2018).

23. Recall that the Policy Coordination Instrument (2019) followed several programmes between Cabo Verde and the IMF (with or without financial support: Stand-By Arrangement (1998/2000), Poverty Reduction and Growth Facility (2002/2005) and Policy Support Instrument (2006/2010 and 2010/2012).

## 6. Final remarks

The goals of the Exchange Rate Cooperation Agreement established between Portugal and Cabo Verde — to promote macroeconomic and financial stability and to increase economic openness — have been achieved with a level of success that justifies in-depth analysis and represents a case study.

The increase in *per capita* income, against a background of higher openness, was one of the most important factors that shaped the last two decades. Among the future challenges, stands out the need to continue the fiscal consolidation process and to enhance economic growth. Efforts that increase labour force qualifications, alongside policies concerned with fostering productive investment, emerge as priorities. The authorities of Cabo Verde should take advantage of ongoing initiatives, such as the *Plano Estratégico de Desenvolvimento Sustentável* and the Policy Coordination Instrument, which aim to promote the population well-being through reforms that adjust the structural features of Cabo Verde to the identified challenges.

## Appendix: Methodologies to estimate potential output and trend unemployment rate

The model used in this article decomposes the GDP ( $y$ ), unemployment rate ( $u$ ) and inflation ( $\pi$ ) in a trend component ( $trend$ ) and a cyclical component ( $gap$ ), namely  $y = y_{trend} + y_{gap}$ ,  $u = u_{trend} + u_{gap}$  e  $\pi = \pi_{trend} + \pi_{gap}$ .

Trends are described by equations

$$\begin{aligned} y_{trend} &= y_{trend(-1)} + I_{\Delta y} && (\text{assuming } I_{\Delta y} = \rho_1 \Delta I_y + (1 - \rho_1) I_{\Delta y(-1)} + \varepsilon_y), \\ u_{trend} &= u_{trend(-1)} + I_{\Delta u} && (I_{\Delta u} = \rho_2 \Delta I_u + (1 - \rho_2) I_{\Delta u(-1)} + \varepsilon_u), \\ \pi_{trend} &= \pi_{trend(-1)} + I_{\Delta \pi} && (I_{\Delta \pi} = \rho_3 \Delta I_\pi + (1 - \rho_3) I_{\Delta \pi(-1)} + \varepsilon_\pi), \end{aligned}$$

in which the unobserved variables  $I_{\Delta y}$ ,  $I_{\Delta u}$  e  $I_{\Delta \pi}$  are influenced ex ante by estimates of  $\Delta I_y = I_y - I_{y(-1)}$ ,  $\Delta I_u = I_u - I_{u(-1)}$  e  $\Delta I_\pi = \pi - \pi(-1)$ , when  $\rho_1, \rho_2, \rho_3 \neq 0$ , while  $\varepsilon_y$ ,  $\varepsilon_u$  e  $\varepsilon_\pi$  are independent and identically distributed (iid) shocks, with normal distribution and zero mean. Subscript (-1) identifies variables in the previous period. The model was estimate assuming that  $I_y$  and  $I_u$  correspond to the result of a Hodrick-Prescott filter over GDP and the unemployment rate, respectively, with a smoothing coefficient equal to 100 ("100 model") and to 6.25 ("6.25 model"). The "Free model" assumes that  $\rho_1, \rho_2, \rho_3 = 0$ .

Cyclical components are connected through a Phillips Curve and an Okun's Law; the output gap is described by an autoregressive process. In particular,

$$\begin{aligned} \pi_{gap} &= \beta_1 y_{gap(-1)} + \varepsilon_{\pi_{gap}}, \\ u_{gap} &= \gamma_1 u_{gap(-1)} + \varepsilon_{u_{gap}}, \\ y_{gap} &= \alpha_1 y_{gap(-1)} + \varepsilon_{y_{gap}}, \end{aligned}$$

where  $\varepsilon_{\pi_{gap}}$ ,  $\varepsilon_{u_{gap}}$  e  $\varepsilon_{y_{gap}}$  are iid shocks, with normal distribution and zero mean. The models were parameterized with Bayesian techniques, and the results are reported in Table A.1.

| <i>Parameters</i> | <i>Prior distribution</i> |              | <i>Posterior distribution - median</i> |                   |                  |
|-------------------|---------------------------|--------------|----------------------------------------|-------------------|------------------|
|                   | Average                   | Distribution | <i>Free model</i>                      | <i>6.25 model</i> | <i>100 model</i> |
| $\alpha_1$        | 0.5                       | $\beta$      | 0.64                                   | 0.49              | 0.59             |
| $\gamma_1$        | 0.5                       | $\beta$      | 0.52                                   | 0.49              | 0.47             |
| $\gamma_2$        | 0.5                       | $\Gamma$     | 0.42                                   | 0.45              | 0.41             |
| $\rho_1$          | 0.5                       | $\beta$      | 0                                      | 0.75              | 0.69             |
| $\rho_2$          | 0.5                       | $\beta$      | 0                                      | 0.62              | 0.62             |
| $\rho_3$          | 0.5                       | $\Gamma$     | 0                                      | 0.69              | 0.62             |
| $\beta_1$         | 0.5                       | $\Gamma$     | 0.28                                   | 0.35              | 0.28             |

TABLE A.1. Prior and posterior distributions

Source: Authors' calculations.

Notes: Beta and Gama distributions are identified by  $\beta$  and  $\Gamma$ , respectively. The posterior distributions are computed with 1 million draws, from which we discard 40%. Inflation is measured by the growth rate of GDP deflator, nevertheless the results are qualitatively similar when using the CPI. Results are based on IRIS, a Matlab toolbox available at <http://www.iris-toolbox.com>.

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