International Economic Trends

Chapter 01

This chapter briefly describes the world's major economic developments in 2017 as well as for the economies of Timor Leste's main economic partners, together with the most relevant global financial markets trends for our economy.

Based on this brief description, the chapter then reviews the main channels of transmission of external economic and financial trends to our domestic economy, detailing the influences observed in 2017 and the perspectives expected for the years ahead.

1.1 Major World Economies

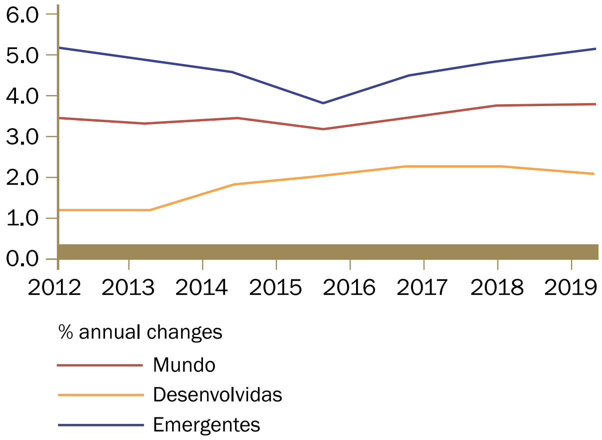
1.1.1. Economic Growth in Major Economies

The world economy contined to show robust growth in 2017, while solid growth is also expected in 2018 and 2019...

In 2017, the world economy recorded an acceleration in terms of growth (3.6%), compared to the average levels recorded in the last 3 years, prolonging the economic recovery of the global financial crisis of 2008-2009. The growth rate of developed economies remained strong in 2017, above 2%, which, together with the acceleration of the growth of the emerging economies (4.6% in 2017), explained the acceleration of world growth. For 2018 and 2019, the IMF expects a continued strong growth in the world economy, underpinned by the dynamism of the emerging bloc, which should offset a slight slowdown in growth in more developed countries.

Chart 1.1

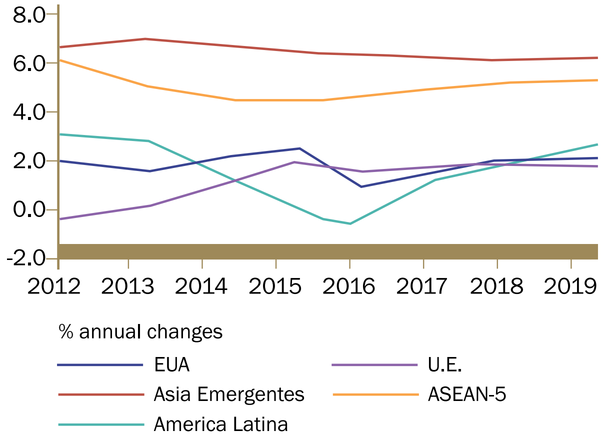
GDP % Growth - 3 Main Blocs



Source: FMI, World Economic Outlook, Outubro 2017

Chart 1.2

GDP growth - Selected Regions



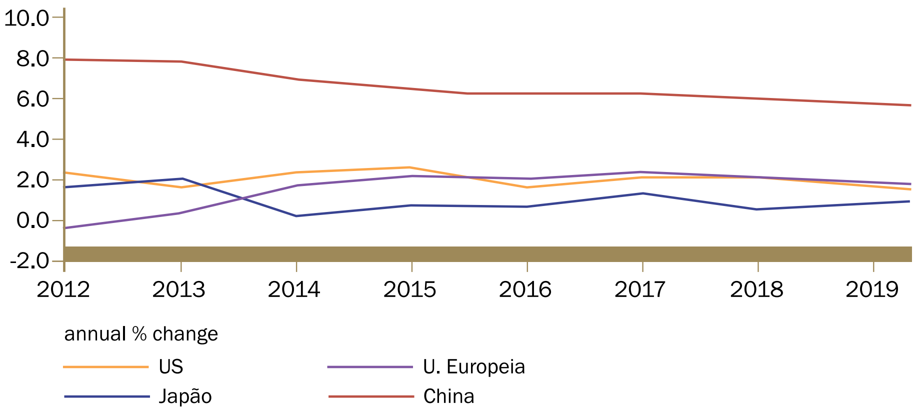
Source: FMI, World Economic Outlook, Outubro 2017

.... ASEAN economies also kept their robust growth levels.

In terms of regions, Asia continued to lead in terms of growth (6.5%) while Latin America was the laggard in terms of GDP growth in 2017 (1.2%), although this region continues to recover from the marked slowdown of 2014 and 2015. Growth in all of ASEAN's five largest economies accelerated to 5.2%, which represents the strongest growth rate for the region since 2013. In line with the IMF's optimism for 2018 and 2019, the Fund expects continued strong economic growth in the US, EU and Asia, while simultaneously projecting an acceleration in growth levels in Latin America, the Middle East and Africa.

Chart 1.3

GDP real % Growth - 4 Largest World Economies



Source: FMI, World Economic Outlook Database, Outubro 2017

Lastly, a comparison of the performance of the 4 major world economies - the US, EU, Japan, and China - shows that China maintained a stable level of growth in 2017, with a gradual and slight deceleration expected to occur in 2018 and 2019. The US experienced a slight economic acceleration in 2017 (2.2%) compared to 2016. While Japan continued to record lower growth levels than the US and EU, it closed the gap versus the other two economies in 2017. In line with the aforementioned IMF forecasts, the world's top 4 economies are expected to maintain their respective levels of growth in 2018 and 2019, with the prospect of further expansion of their respective economies above potential growth levels.

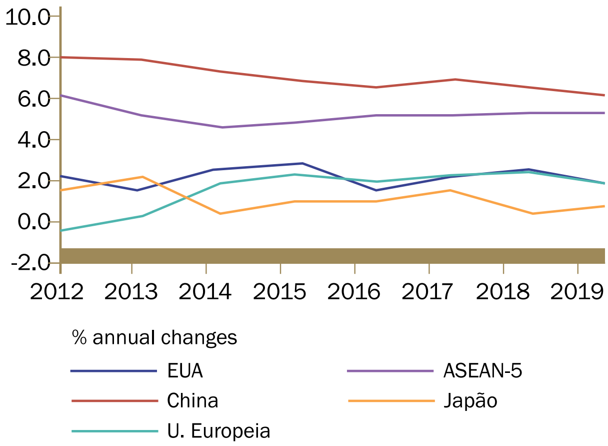
1.1.2. Inflationary Trends in Major Economies

Global infaltionary pressures rose in 2017...

In 2017 there was a slight acceleration in inflation rates in the major world economies, building on the trend registered in 2016, with particular emphasis on the US and EU, whose annual average inflation rates rose to about 2.1% and 1.7%, compared to virtually zero (0%) in 2015.

Chart 1.4

Inflation Rates % - Selected Economies



Source: FMI, World Economic Outlook Database, Outubro 2017

.... on the back of continued strong global economic growth and commmmodity prices recovery.

The gradual recovery in inflation was mainly due to the rise in prices of the main world commodities in 2017, especially the rise in energy prices compared to the depressed values of 2015. For 2018 and 2019, the IMF envisions a scenario of stable price pressures in the main economies, highlighting the possibility of a further acceleration of US inflation in 2019, resulting from the maintenance of solid growth levels, as effective GDP is now expected to grow increasingly above potential GDP level.

It should be noted that the IMF expects the Japanese and EU economies to continue to experience lower rates of inflation than the US, given the existence of "space" in terms of resources not used in these economies, which continue to operate below their potential level. However, in spite of the marked economic recovery in the EU and Japan, it will be necessary that both economies continue to grow robustly for several consecutive years in order to effectively close the deficit in the use of economic resources and to materialize substantial inflationary pressures in these economies. Japan, despite continuing to adopt a highly expansionary set of monetary measures, continued to record anemic inflation levels around the levels recorded in the last decade.

1.1.3. Commodity Markets

Commodity prices have partially recovered from the substantial falls of 2015....

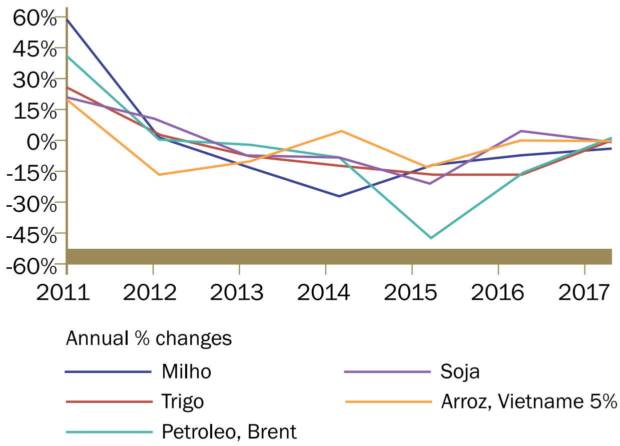
In the global commodity markets, 2017 was marked by the continued recovery in international prices of energy and industrial metals inputs, following the substantial declines registered in 2015 and the anemic evolution of food prices. As shown below, of the four food commodities considered, only wheat and rice recorded price increases in 2017. The price of oil and other energy sources continued to recover some of the lost ground of 2015, but international prices remain substantially below the price peaks in the last decade. Considering that the main world economies presented robust growth levels in 2017, the recovery of the prices of energy inputs and industrial metals justifies the already mentioned recovery of the inflationary pressures in the respective economies.

.... supporting growth in commodity producer and exporter countries.

For the exporting economies of these goods, typically developing countries, the recovery of international prices represents a positive stimulus to their incomes and, consequently, on their economies. A clear example of this is of course Latin America and Russia, which benefited from the recovery in energy commodity and metals prices in 2017. On the other hand, the continued decline in the price of food staples had a negative impact on the countries that export this type of goods.

Chart 1.5

Major Commodities Prices



Source: Banco Mudial, Commodities Datasheet, Fevereiro 2017

1.1.4. Major Financial Markets

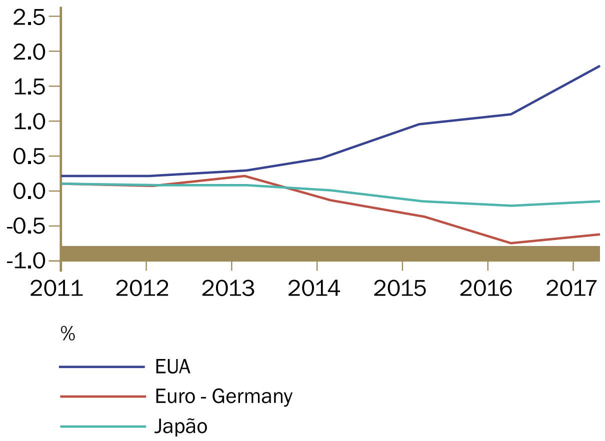
US 2 year interest rates rose again in 2017, in line with monetary policy trajectory....

In terms of financial markets, we start by analyzing the evolution of the main bond markets, namely those of Treasury bonds, which allow us to gauge the evolution, and respective expectations, of the monetary policies of the various economies, as well as their respective rates of growth and inflationary expectations.

Two-year interest rates, which are more sensitive to changes in monetary policy, continued to show the clear divergence in policies between the world's 3 largest economies in 2017, with markets gradually incorporating in 2017 the impact of rising policy rates in the US monetary policy.

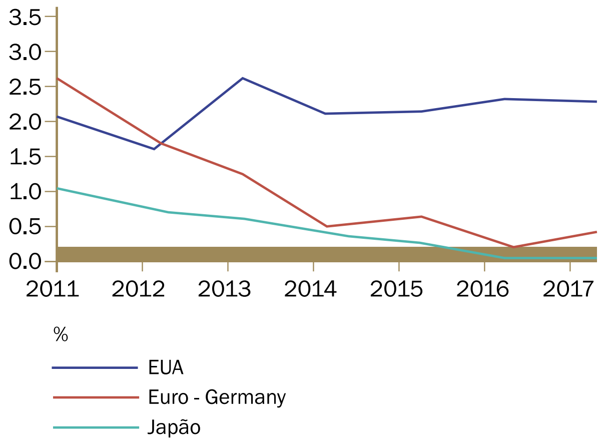
With regard to 10-year interest rates, US interest rates remained stable in 2017, with a slight recovery in interest rates in Germany. For both 2 and 10 years, US interest rates remained at much higher levels than those in the Euro-Zone and Japan, as a result of the improved performance of the US economy in recent years, which eventually justified the continuation of the rate increase by the FRB in 2017.

Chart 1.6
2 Year Treasury Bond Yields



Source: Bloomberg

Chart 1.7
10 Year Treasury Bond Yields



Source: Bloomberg

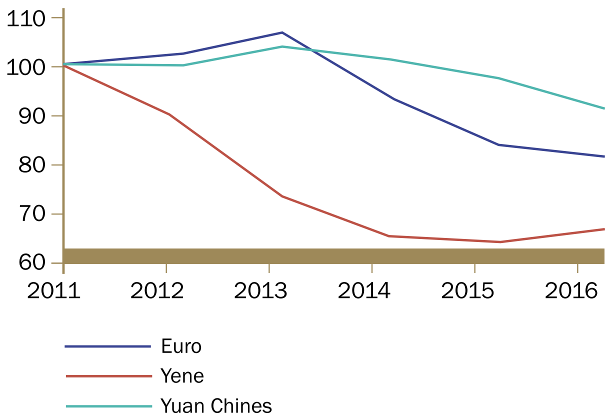
.... but the USD lost ground vs major world currencies in 2017.

Of course, the trends in bond markets, together with the economic developments already analyzed, have also determined a large part of the developments in the main global foreign exchange and equity markets.

However, in foreign exchange markets the dollar depreciated against the euro and the yen in 2017, due to both the excessive appreciation of the dollar in previous years and the consolidation of reduction of monetary stimulus in the euro area and Japan throughout 2017 as a result of the recovery of their respective economies.

Chart 1.8

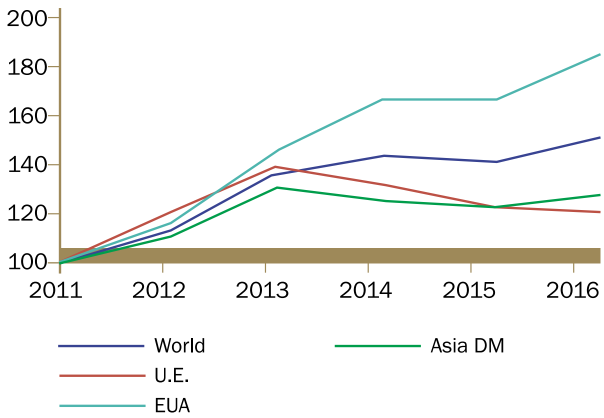
Major FX rates vs US $. 2011=100;
A decrease means depreciation



Source: Google

Chart 1.9

Major Equity Markets, Prices Indexed in USD. 2011=100



Source: Google

Major global equity markets registered strong gains in 2017.

On the other hand, the US stock market again recorded remarkable gains in 2017, similar to 2016, benefiting from the strong recovery after the conclusion of the Presidential election and the approval of a substantial fiscal stimulus program, continuing to trend above other major world markets. In 2017, as shown above, despite the remarkable performance of the North American equity market, it is also worth mentioning the substantial rise in share prices in the Asian and European markets, which recovered part of the lost ground between 2013 and 2016.

Given the substantial out-performance of US equities over the past eight years that have resulted in substantial price appreciation in proportion to business results, it should be noted that a possible economic downturn in the US economy or in corporate profits could result in a correction in this stock market.

After synthesizing the macroeconomic trends for the major world economies, it will also be relevant to deepen the analysis of economic developments in Asia, in particular ASEAN, as the main economic partners of Timor-Leste are located in this region.

1.2

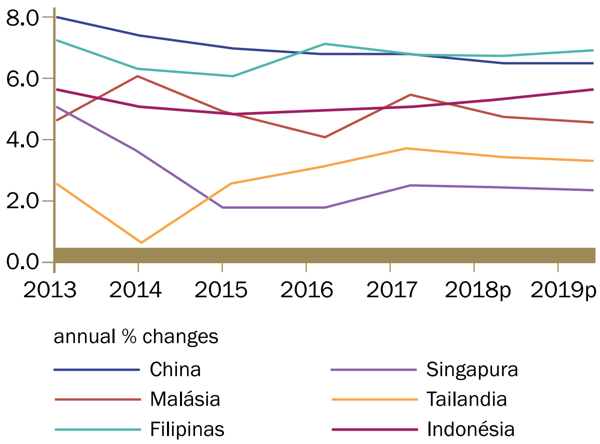
Asian Economic Trends and Outlook

Our analysis focuses on the 5 largest economies of ASEAN and China, whose economy is assuming increasing regional and global relevance, because these are the main partners of our economy. On the other hand, of these 6 economies, Indonesia remains the major economic partner of Timor-Leste, which justifies some specific comments on its evolution.

In terms of the 2 main macroeconomic indicators, GDP growth and inflation rates, growth levels remained robust in the region in 2017, with an average growth rate of around 5% for all 6 economies. In terms of inflation, the region recorded average rates of 2.4%, up from 1.5% in 2016. The Indonesian economy continued to maintain a high local inflation levels versus those of the other partners.

Chart 1.10

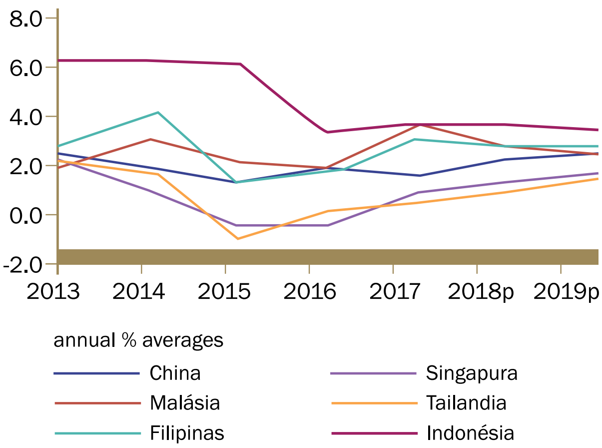
GDP real growth rates



Source: IMF WEO

Chart 1.11

Inflation Rates - Annual % changes



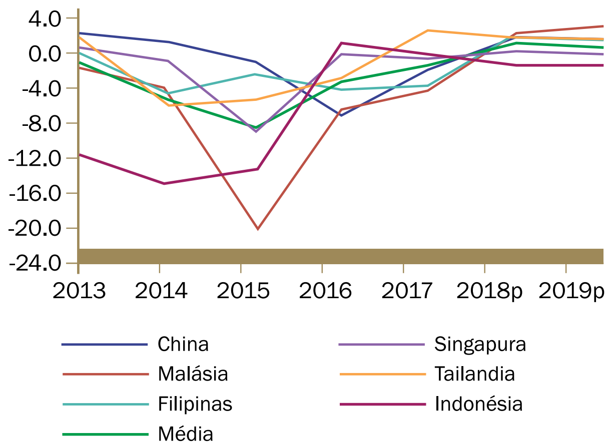
Source: IMF WEO

Continued economic dynamism in the region in 2017, and the resulting increase in inflation in the various economies, together with the slight depreciation of the regional currencies against the dollar, has in turn explained the slight increase in regional inflationary pressures, when measured in US dollars.

Regional Asian currencies registered a slight deprecitaion vs ths USD in 2017....

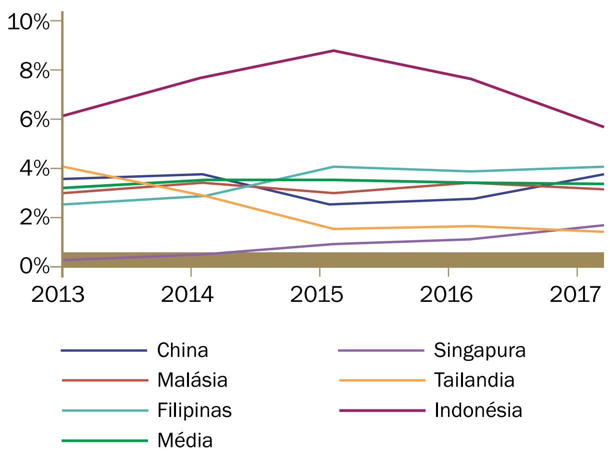
The evolution of the macroeconomic determinants helps to explain, as is also explained, the developments in the two main financial markets, the exchange rate and the bond market. In terms of exchange rates, 2017 was also marked by the generalized depreciation of regional currencies against the dollar, resulting from the gradual elimination of expansionary monetary policies in the US. On average, the region's currencies declined against the dollar by -1.7% 2017 (-3.4% in 2016), but the IMF expects regional currencies to remain stable against the US dollar in 2018 and 2019, which will help to stabilize inflationary pressures in the region and, above all, to stabilize the prices of goods imported into Timor-Leste.

Chart 1.12
Exchange Rates - % changes vs USD



Source: IMF WEO

Chart 1.13
2 Years Treasury Bond Yields



Source: ADB

.... while the regional 2 year rates were stable, except for Indonesia, whose rates continued on a downward trajectory.

Bond market interest rates, represented here by 2-year regional Treasury Bonds, were generally stable in the region, with Indonesia being the only exception. In the case of Indonesia, interest rates continued to decline substantially starting in 2016, benefiting from the successive decrease in the interest rates of the respective central bank, in response to the moderation of inflationary pressures in the economy, as well as the reduction of the respective external deficit.

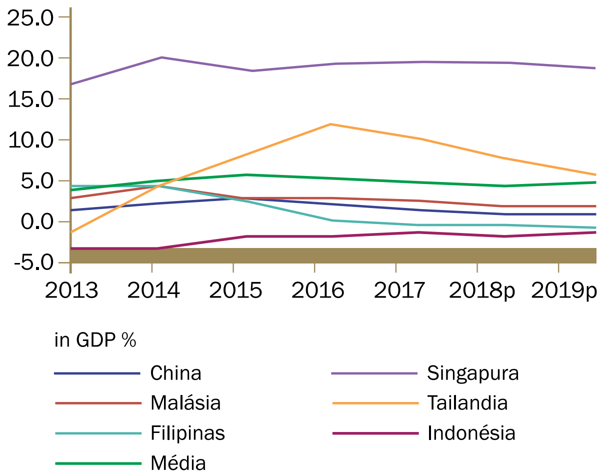
Regional current accounts were kept in surplus, except for Indonesia and Philippines.

Concerning the balance of external and public accounts, we can conclude that most of the partners continued to maintain substantial external surpluses in 2017, with the exception of the Philippines and Indonesia, which maintained a current external account deficit of -1.7%. Since Indonesia is an exporting country of raw materials, especially energy and industrial metals, the decline in international prices of these commodities in the last 3 years has resulted in a substantial negative shock to its economy, requiring stronger restrictive macroeconomic policies to contain the dynamism of domestic demand, to correct the external deficit and to contain the depreciation of the rupiah against the dollar.

In terms of budgetary balances, 2017 was characterized by a slight increase in public deficits in the region, adding to the deterioration already registered in 2016, while Singapore has registered a decling surplus over the last few years. The two regional exceptions remain Singapore (+1.7%) and Malaysia (negative), with a government deficit of -3% in 2017.

Chart 1.14

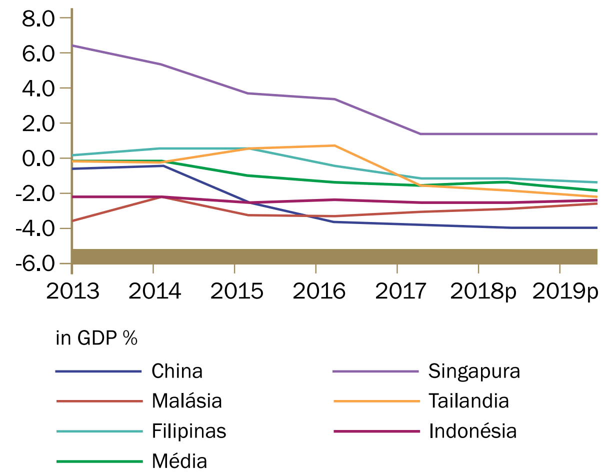
Partners External Accounts Surplus



Source: IMF WEO

Chart 1.15

Partners Public Budget Surplus



Source: IMF WEO

In general, regional economies were robust and stable in 2017.

In sum, the region's macroeconomic background remained relatively stable in 2017, with a notable reduction in the degree of depreciation of the regional currencies against the dollar in 2017 and 2016, when compared to the subtantial depreciations of 2015. This depreciation seems in general, more due to the beginning of the cycle of rising interest rates in the US than to macroeconomic imbalances in the region given the maintenance of strong economic growth rates and the strong external position of regional economies.

It should be noted, however, that this general idea does not fully apply to the Indonesian economy, Timor-Leste's largest partner. However, the Indonesian rupiah was relatively stable in 2017, after having experienced substantial losses vis-a-vis the dollar between 2013 and 2015. Although experiencing remarkable levels of exchange rate volatility, along with the imbalances already mentioned, the Indonesian economy managed to maintain a robust annual growth of 5.2% in 2017, compared to +5% in 2016. The importance of this economy for our economy naturally implies the maintenance of an adequate monitoring of these developments, but it is expected that the policies introduced by its Government and closer surveillance by its Central Bank, will gradually reduce these macroeconomic risks.

The above review of major international economic and financial developments as well as of Asian economic developments, which are much more relevant for Timor-Leste, would not be complete without understanding the respective repercussions on our economy.

1.3

Economic Transmission Channels to Timor-Leste

1.3.1. Summary

This point tries to identify the main channels of transmission of the international developments to our economy. At present, it is reasonable to accept that these effects are still small and limited to certain sectoral aspects of our economy. This chapter seeks to illustrate the mechanism of operation of the main channels, namely: the impact on the evolution of domestic inflation levels, determination of the value of oil revenues and effects on the value of the investments made under the Petroleum Fund. Foreign Direct Investment is certainly one of the variables most influenced by the external context, but the scarcity of effective investments and reliable data in Timor-Leste does not allow us to analyze this relationship properly.

Of course, as our economy develops and effectively deepens interdepence relations with its regional economic partners, we expect that external developments will increasingly influence the evolution of our economy, expanding the number influence of each transmission channel.

1.3.2. Imported Inflation

BCTL's inflation modelling approach uses 2 main drivers for domestic inflation: external inflation and domestic economic activity.

One of the main transmission channels for our economy is the impact of international prices on the evolution of domestic inflation and respective expectations. Since Timor-Leste is primarily an import economy - imports of goods and services accounted for 58% of non-oil GDP in 2017 - it is expected that the evolution of international prices of imported goods and services will substantially affect domestic inflation.

BCTL's empirical research and economic modelling has confirmed the importance of this channel. One of the main problems of our work in this context stems from the difficulty in defining an appropriate variable to measure the level of "external inflation" for Timor-Leste, given the absence of an import price index and the large variability of import basket and of the geographical structure of our imports. After experimenting with several functional forms for this variable, we concluded that the most appropriate empirical variable seems to be an average of the inflation rates of the 5 largest economies of ASEAN and China converted into dollars. In practice, this measure corresponds to an average of the regional inflation rate measured in dollars, which at the same time captures the impact of regional exchange rate variations against the dollar and local currency inflation rates.

External inflation has continued to drive domestic inflation trends....

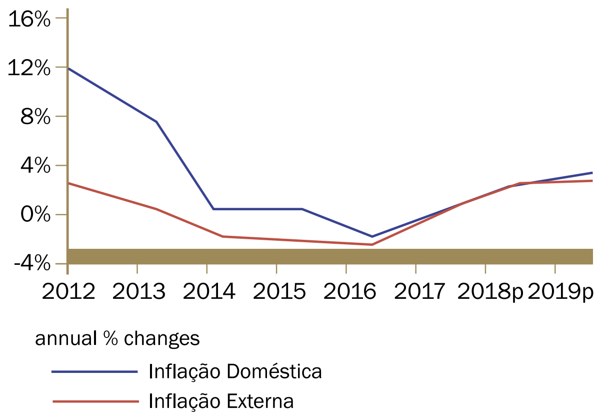
As can be seen in the chart below and to the left, the domestic inflation rate tends to reasonably follow the movements of the external inflation rate, albeit with less volatility. Insofar as the external inflation rate corresponds to the average of the six economies already mentioned, the BCTL inflation forecast models use these variable and respective expectations to construct inflation forecasts.

.... pushing domestic inflation upwards, and is expected to continue to exert upward pressure in 2018 and 2019.

In addition, as can be seen from the two graphs below, the recent sharp increase in the rate of inflation in Timor Leste has been reinforced by the rise in external inflation rates. Of course, the relationship is not perfect, since the evolution of Timor-Leste's non-oil economy, especially in the last decade, has also strongly affected the evolution of the domestic inflation rate.

Chart 1.16

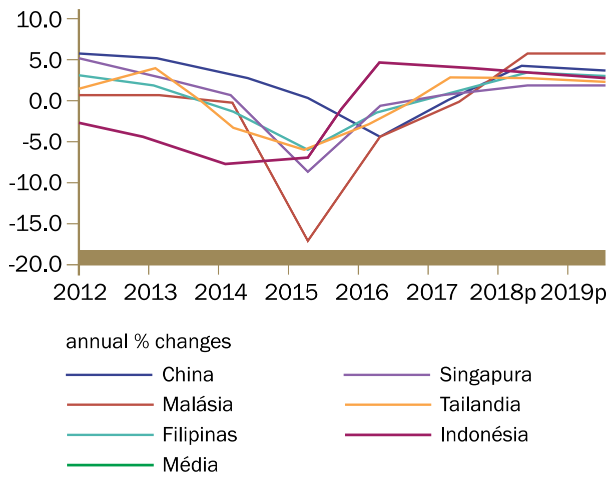
Domestic vs External Inflation



Source: IMF WEO

Chart 1.17

Regional Inflation Rates in USD



Source: IMF WEO

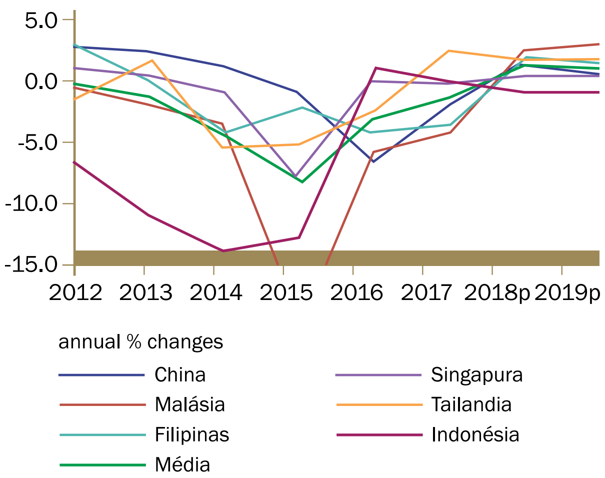
Rising regional inlation in USD was mostly due to rising to domestic inflation rates across the region, in local currency terms.

In 2017, the slight increase in regional dollar inflation rates observed for practically all economies was mainly due to the rise in inflation rates in local currency and the relative stability of Asian currencies against the dollar, as can be seen in the charts below. In fact, the continued widespread depreciation of regional currencies after declines from 2013 to 2015 has been one of the factors that have contributed most to the substantial decline and maintenance of historically low inflation in Timor-Leste, as they cheapened imported goods and services.

Since external inflation rates in local currency are relatively stable over time, the movements of the partners' currencies against the dollar are, in turn, a very important driver of domestic inflation. It should also be noted that the substantial reduction in inflation in Timor-Leste is also a result of declines in international prices of the most representative commodities, such as oil and food, as previously mentioned.

Chart 1.18

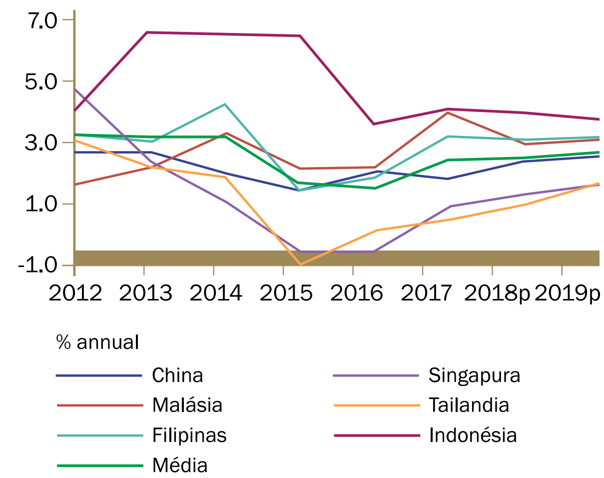
Asian Currencies vs the USD



Source: IMF WEO

Chart 1.19

Partners Inflation Rates - in local currency



Source: IMF WEO

Given the importance of this transmission channel, the future developments in "external inflation" trends, strongly determined by the exchange rate changes, will continue to be one of the most influential factors in determining the evolution of domestic inflation. In this regard, the BCTL now expects, in line with the IMF, that regional currencies will remain stable against the dollar in 2018 and 2019, which together with the maintenance of moderate partner inflation rates, leads us to predict that imported inflation will increase, but only slightly, over the same timeframe, contributing to rising, but controlled, inflationary pressures in Timor-Leste in 2018 and 2019.

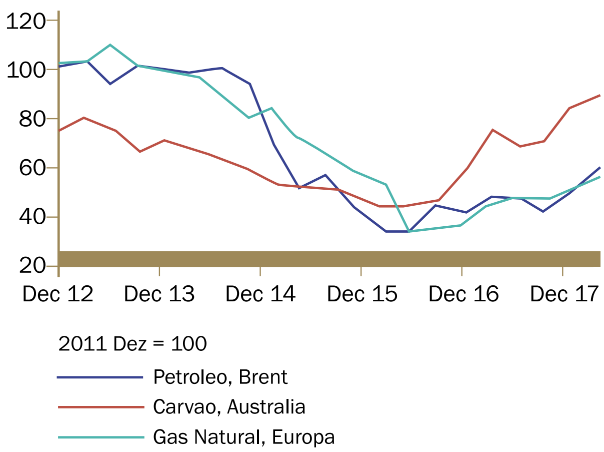
1.3.3. Global Energy Markets and Petroleum Revenues

Oil prices continued to recover in 2017, but have not yet fully recovered from the substantial falls registered in 2014 and 2015.

Prices for oil, natural gas and other energy resources are highly volatile, fluctuating substantially between periods of high and low-price levels. The graphs below show these fluctuations and allow us to place the recent drop in energy prices in a multi-year perspective. It should be noted that it is not uncommon for prices to fall by 50% and rise by more than 50% within 1 year. In terms of levels, the sharp decline in oil prices from the end of 2014 resulted in prices similar to those of 2006, canceling out all the nominal price gains registered in 9 years. However, in 2017, there was a substantial recovery in the price of these inputs, especially of coal, but still to price levels well below the highs of the last 5 years.

Chart 1.20

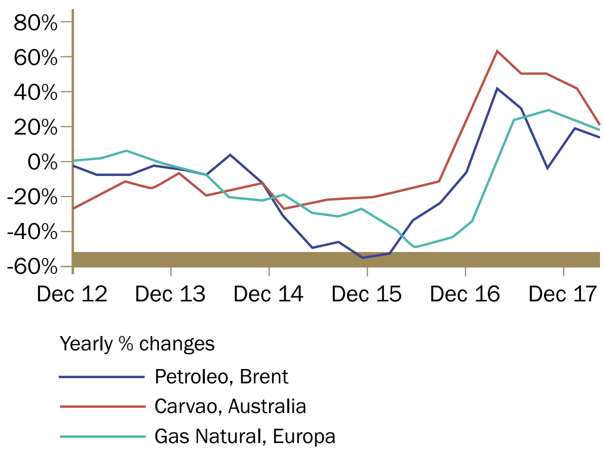
Spot Energy Prices



Source: Banco Mundial

Chart 1.21

Spot Energy Prices - % change



Source: Banco Mundial

However, the evolution of energy prices is not easy to anticipate, as it results both from the interdependence between demand and aggregate supply on physical markets and, increasingly, from the less measurable and unpredictable effects resulting from the "financialisation" of these markets, yielded by the expansion of the financial derivatives market and increasing participation of financial intermediaries and speculators. An obvious proof of this inability to predict is clearly the recent drop in the price of oil, the speed and breadth of which were in no way predicted by the majority of market players and analysts.

Expected future petroleum volumes are now substantially lower than in the past, greatly reducing the impact of fluctuating oil prices on Petroleum Wealth.

This observation is important because it prevents us from accepting simplistic scenarios and extrapolating further price declines, based only on the recent drop in oil prices. On the other hand, the evolution of the price of petroleum products is important for Timor-Leste, since significant oil revenues are still expected in coming years.

It should also be noted that the impact of fluctuations in energy prices on the country's oil wealth is much lower today than in previous years. This is due to the fact that future oil volumes are now much reduced compared to what has already been extracted from the Timor Sea reserves, with the prospect of the exploitation of the existing fields completely ceasing until 2021. It should therefore be noted that future revenues envisaged from 2017 to 2021 amount to only 551 million dollars, corresponding to only 2.6% of the accumulated revenues obtained from 2002 to 2016, totalling US$ 21,412 million. In 2015, the value of future revenues was 868 million, or 4.1% of revenues obtained until that year. At the end of 2015, future revenues of around US$ 1,400 millions were expected between 2016 and 2021, which is much higher than the current estimate by the State, due to the fall in oil and gas production forecasts in the Timor Sea and lower prices for these goods.

Given the small estimate of the future oil revenues of the Timor Sea, we prefer not to develop in this report, as we have done in previous years, the sensitivity analysis of revenues in relation to the oil price.

1.3.4. Financial Markets and the Petroleum Fund

Financial market prices influence the Petroleum Fund's value and its sustainable income and, subsequently, public spending policies.

Lastly, we also address another channel of transmission of international developments to our economy, which relates to the Petroleum Fund created to efficiently manage the country's oil wealth. The mechanism of operation of this channel is similar to that of the price of oil, as the evolution of prices of international financial assets determines the value of the Petroleum Fund and, in turn, the value of its 'Estimated Sustainable Income (ESI)'. Insofar as they affect these two aggregates, financial asset prices ultimately influence the amount of revenue available to finance the State Budget and, consequently, the pace and size of spending and public investment policies.

The PF has now invested 60% of its assets in Treasury Bonds and the remaining 40% in equities.

The Petroleum Fund (PF) closed the year 2017 with the value of financial assets amounting to US $ 16.799 million, mostly invested (60%) in Treasury bonds of the most developed countries and in shares (40%) of nearly two thousand companies based in these same countries. The Fund was able to reverse the declines in the total value of assets recorded in 2015 and 2016, increasing by $US 955 million in 2017. Since its inception, the PF has been expanding its investment universe, firstly by first investing in US Treasury securities, then gradually investing in equities and, finally, extending investments to bonds issued by major worldwide Treasuries. The gradual extension of the investment mandate was driven by the increasing demand for a higher expected return to the Fund and the greater diversification of the investments and markets under consideration.

PF performance is now crucially driven by price trends in global bond and equities markets….

….but foreign exchange fluctuants also affect the FP, which has invested in currencies beyond the USD.

Of course, this institutional development exposes the Fund to new risks and markets, but which, by benefiting from the diversification of the prices of the various assets, allows a more solid Portfolio to be built and whose risk-return profile is more efficient. At present the Fund invests only in fixed interest rate bonds and equities, so that interest on bonds and dividends on shares provide the Fund with a fixed and constant income, at least 'a priori'. Of course, by investing in bond and equity securities, the Fund benefits from increases in market values or, on the contrary, can be adversely affected by its decline. Accordingly, the Fund's main financial risks correspond to possible losses arising from the fall in the prices of the bonds or the shares acquired. In addition, since the PF invests in several markets, denominated in currencies other than the US dollar, the Fund is also exposed to the exchange rate risk of investments, understood as the possibility of depreciation of the various investment currencies against the dollar. In short, the financial risk of the PF includes 3 types of market risks: equity risk, or risk of falling prices of the main world stock markets, interest rate risk, which corresponds to the risk of falling treasury bond prices; and currency risk, which consists of the risk of depreciation of the investment currencies against the US dollar.

In 2017, the FP registered solid gains, boosted by gains across world equities and bond markets.

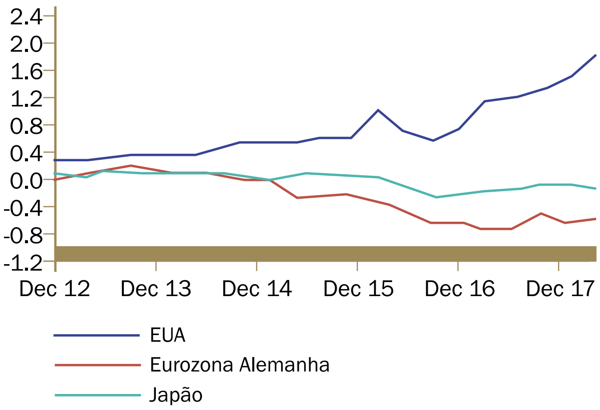
The evolution of the prices of PF's assets and of the various investment currencies thus consists of the true transmission channel between international markets, the FP valuation and the its 'estimated sustainable income' level. In terms of returns, the year 2017 was very positive for the PF (+ 10.4%), the highest annual gain in its history, benefiting from the gains of both equity investments (22.3%) and the bond portfolio holdings (2.7%). The excellent performance of the stock and bond markets and the benefit of the small depreciation of the US dollar against the PF's investment currencies resulted in a substantial profitability for the year as a whole.

Treasury Bonds investments registered moderate gains in 2017.

In the world's Treasury bond markets in 2017, there has been a generalized rise in interest rates, particularly for the shorter maturities of yield curves. Nevertheless, in spite of the trend towards higher interest rates, which tended to undermine the value of the bonds, the FP was able to accumulate the income of the coupons received, registering an overall performance of 2.7% in this type of investment.

Chart 1.22

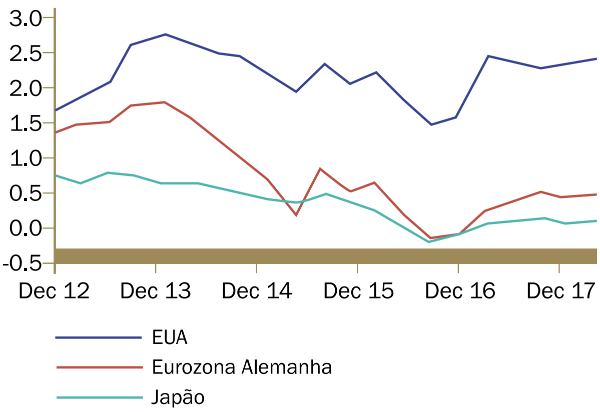
2 Year Yields - %



Source: Bloomberg

Chart 1.23

10 Year Yields - %

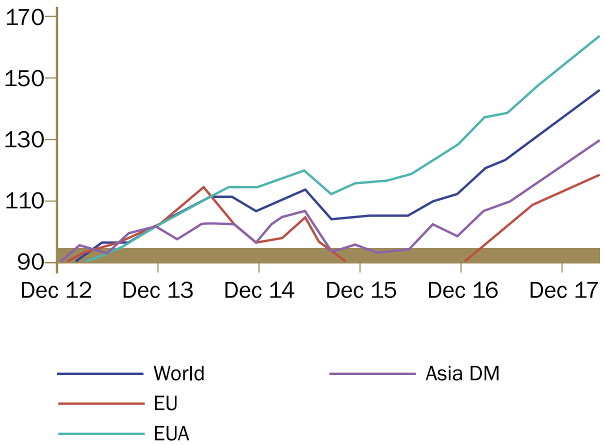


Source: Bloomberg

In terms of equity markets, the Fund's benchmark ("MSCI World") saw substantial gains in 2017, mostly driven by the steep rise in the US equity market but also by the majority of global equity markets. In terms of exchange rates, the depreciation of the US dollar against most of the PF investment debt in 2017 helped to recoup some of the foreign exchange losses recorded in previous years, thus reinforcing equity markets' gains in local currency terms.

Chart 1.24

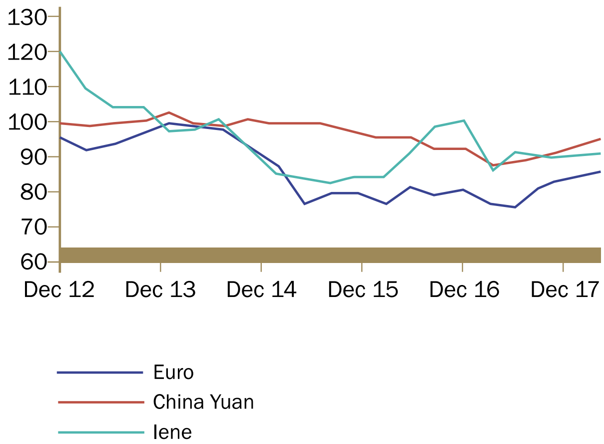
Equity Markets– 2012 Dez = 100



Source: Google

Chart 1.25

Currencies vs USD – 2012 Dez = 100



Source: Google

PF value and expected income will continue to depend on future price trajectories of global equities and bonds.

In summary, the Petroleum Fund is now invested in a very diversified portfolio of securities traded in the main equity and bond markets worldwide, allowing it to optimize its return-income profile. However, given the substantial investments in global bonds and equities, we can conclude that the value and yield of the PF is intrinsically dependent on the evolution of the global prices of these assets, which is naturally affected by the dollar's evolution against the currencies of the respective investments.

Looking at a longer time-frame, we do think that the risk of a global stock or bond market fall is now substantial, given the current high stock market valuations and the historically low level of bond interest rates. It should be noted in this regard that the US stock market registered in 2017 the eighth consecutive year of gains since 2009, more than doubling its price level since December 2009.

However, the long investment horizon of the Fund and its institutional framework should allow us to deal with the fluctuations of the markets in a rational way and even to benefit from episodic price declines that ocasionaly arise in these markets.


7m 798,483
2m 27.64
9 89.40 46.48
67,265.54 30.59
5m 36,618.74
65,102.50