CFA franc: a new stress test

Stéphane Alby

The CFA franc’s stability is a source of concern. The drop-off in oil prices has weakened one of the two CFA franc regions so much that fears of devaluation have emerged again. In the end, the status quo is bound to prevail. With IMF support, several countries have engaged in stabilisation programmes that are beginning to bear fruit. Liquidity indicators are still a far cry from the alert thresholds defined in the CFA monetary agreements, and the financial and inflationary effects of devaluation would be disastrous. Yet to sustain the currency peg, several major challenges lie ahead, not only for the West African Economic and Monetary Union (WAEMU), whose robust growth fuels macroeconomic imbalances, but also for the Central African Economic and Monetary Community (CEMAC), which is now paying a heavy price for its oil dependency.

The CFA franc no longer enjoys unanimous support. This currency, which is shared by 14 African countries and pegged to the euro, is seen as a guarantee of stability for some, but a hindrance to economic development for others. The loss of sovereignty inherent in CFA mechanisms is also a source of tension. Yet to top off these recurrent criticisms, there are now fears about its stability. Part of the zone has been hit by major macroeconomic troubles since the drop-off in oil prices in the second half of 2014. Although scenarios calling for the adjustment or abandon of the euro peg have come and gone repeatedly, the current situation at least has the merit of reminding us that the CFA franc is comprised of not one but two distinct currencies.

Despite the long-standing history of this monetary system, it is still hard to grasp due to the French guarantee. The CFA franc co-exists in two distinct monetary unions: the West Africa Economic and Monetary Union (WAEMU), comprised of Benin, Burkina Faso, Côte d’Ivoire, Guinea-Bissau, Mali, Niger, Senegal and Togo, and the Central Africa Economic and Monetary Community (CEMAC), comprised of Cameroon, the Central African Republic, the Republic of Congo, Gabon, Equatorial Guinea and Chad. Each monetary union has its own central bank. The two currencies have the same value (CFA franc 655 for EUR 1), but transfers are not allowed. In addition, the CFA franc zone as a whole is increasingly heterogeneous.

This article will not try to determine whether or not reforms are needed, but will address the growing sense of concern among both local and foreign economic players active in the region: is the CFA franc under threat? To answer this question, we will first review the main currency mechanisms before analysing the macroeconomic dynamics of the two monetary unions, the supportive factors, and the challenges that lie ahead.

Functioning of the CFA zone

Common principles

The CFA zone encompasses an array of 14 countries divided into two monetary unions, whose currency has been pegged to the euro since 1999 at a fixed exchange rate of CFA franc 655. In addition to the euro peg, the system is founded on two core principles: 1) the guarantee of unlimited convertibility by the French Treasury and 2) the free transferability within each monetary union. In counterpart, each country’s foreign reserves are pooled within the two regional central banks, BCEAO, for the WAEMU and BEAC for the CEMAC. Half of their reserves must be deposited in “operation accounts” at the French Treasury. The yield on these accounts is currently 0.75%.

The currency peg’s credibility is derived essentially from the possibility of resorting to unlimited advances from the French Treasury, which lends the CFA franc a unique status among the global panel of currencies. Several countries have adopted the US dollar as their currency, for example, but none benefit from a guarantee from the United States. Moreover, the pooling of foreign exchange reserves within each monetary union implies a solidarity mechanism between member countries. An alert threshold was set up to ensure the system’s stability. Each of the regional central banks must have external assets that cover at least 20% of sight liabilities. This provides them with adjustment mechanisms in case of a squeeze on external liquidity, even though the law does not prevent them from having debtor positions with the French Treasury.

Each monetary union has its own currency that is not convertible with the other: the XOF for WAEMU and XAF for CEMAC. This implies that there can be divergences in monetary policy, whether in terms of key rates (currently 4.5% for BCEAO and 2.95% for BEAC) or the conditions for banks to access the refinancing window. Despite the euro peg, there is a significant yield spread with the European Central Bank (ECB). Moreover, unlike the BCEAO, the BEAC can make direct advances to states representing up to 20% of the previous year’s fiscal revenue. Within each monetary union, macroeconomic convergence criteria have been set but are not binding.

Lastly, the value of the currency can be adjusted, even though such events are rare. The CFA franc has been devalued only once in its 70-year history. In 1994, the CFA franc had to be devalued by 50% against the French franc to correct major macroeconomic imbalances. The decision applied to the CFA zone as a whole, but the two currencies are separate, which leaves open the possibility for differentiated adjustments.
Undeniable benefits

The CFA franc zone has not fulfilled all its objectives by a long shot, particularly in terms of regional integration. Trade within the WAEMU barely exceeds 10% of total trade flows, and what is more, this percentage has been relatively stable over the long term. Intra-zone trade within the CEMAC is even smaller (chart 1). The lack of deeper trade relations is disappointing, despite the absence of tariff barriers and the use of a single currency. Apparently, the CFA zone is not very attractive to foreign investors either, despite the visibility provided by the absence of foreign exchange risk (see end of this section).

Share of intra-zone trade

![Chart 1](chart1.png)

Inflation

![Chart 2](chart2.png)

Lastly, as a member of the CFA zone, the risk of a balance of payments crisis is eliminated de facto, as long as the convertibility of the currency is ensured. This is a big advantage for countries that are mainly commodity exporters, and thus exposed to sharp fluctuations in the terms of trade. This situation can be illustrated by the spectacular deterioration of Ghana’s macro-financial situation, which has an economic structure rather similar to the Côte d’Ivoire. In general, the peg has been tested on numerous occasions, notably during the Côte d’Ivoire’s post-electoral crisis in late 2010 and early 2011. So far it has proven to be very resilient.

One monetary zone, two separate realities, and no adjustment in sight

With WAEMU reporting robust growth of more than 6% and CEMAC suffering from the drop-off in oil prices, rarely have there been such heterogeneous macroeconomic performances in the CFA franc zone. And yet the prevailing consensus is that there are no fundamental reasons to adjust the exchange rate. Unlike the situation that prevailed in the early 1990s, external liquidity indicators are still well above the alert thresholds, at least as defined by CFA monetary agreements (chart 4).
This is basically the message that was delivered in Yaoundé, Cameroon's capital, during an extraordinary meeting of CEMAC heads of state, the French finance minister, and the IMF director in late 2016. In exchange for major financial assistance, the recipient countries agreed to engage in macroeconomic consolidation programmes to strengthen the peg's stability. This situation differs from the one in 1994, when support was conditioned on the devaluation of the CFA franc. In early 2018, CEMAC's external liquidity seems to have stabilised, even though the outlook is still fragile. For the WAEMU countries, although the pressure is not as high, the dynamics of vigorous economic growth are not without risk since they are accompanied by major macroeconomic imbalances, which in the end gradually erode external liquidity.

CEMAC: a delicate stabilisation

Of the six countries that make up CEMAC, five are oil producers, of which Cameroon stands out from the others due to its more diversified economy (table 1). At the aggregate level, revenues generated by the hydrocarbon sector accounted for 82% of exports and more than half of fiscal resources in 2014. Several ambitious public investment programmes were also underway just as oil prices collapsed, which only accentuated the macro-financial shock.

The situation rapidly became critical. Between 2015 and 2016, CEMAC lost two thirds of its oil-related budget revenues and half of its exports. Although public investment was cut back sharply, to 8.4% of GDP in 2016 from 14% in 2014, macroeconomic imbalances continued to aggravate. The region's budget deficit rose to 6% of GDP in 2016, from 4.5% in 2014. The deterioration in the external position was even more spectacular. From 1.5% of GDP, the current account deficit soared to 13% of GDP in 2015, before easing slightly thereafter to 10% in 2016.

The macroeconomic buffers proved to be insufficient. Without any real external financial support, and a virtually non-existent local/regional bond market, member states were initially forced to dip into their deposits with the BEAC (chart 5). By year-end 2016, however, deposits had dwindled to only 2.3% of regional GDP, down 60% from the 2015 level. The BEAC then decided to reverse its policy of gradually eliminating statutory advances. All of the member states resorted to statutory advances in 2016, and, with the exception of Cameroon, used the maximum amounts available. Yet this strategy has proven to have numerous limitations.

### Oil sector weighting, in % (2014)

<table>
<thead>
<tr>
<th>Country</th>
<th>GDP</th>
<th>Exports</th>
<th>Fiscal revenue</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cameroon</td>
<td>6.2</td>
<td>41.7</td>
<td>23.7</td>
</tr>
<tr>
<td>Central African Republic</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Republic of Congo</td>
<td>59.3</td>
<td>88</td>
<td>68.6</td>
</tr>
<tr>
<td>Equatorial Guinea</td>
<td>40.8</td>
<td>96.7</td>
<td>86.5</td>
</tr>
<tr>
<td>Gabon</td>
<td>37.9</td>
<td>83.9</td>
<td>49.5</td>
</tr>
<tr>
<td>Chad</td>
<td>25.1</td>
<td>81.9</td>
<td>49.3</td>
</tr>
<tr>
<td>CAEMC</td>
<td>29.1</td>
<td>81.6</td>
<td>55.1</td>
</tr>
</tbody>
</table>

Table 1 Source: IMF

Liquidity problems persisted, leading to an accumulation of government arrears with suppliers, which only amplified the impact of the contraction of public spending on the region's economy (chart 6). As a result, non-oil economic growth dropped from 4.5% in 2014 to an average of only 1% in 2015-16. Given the decline in oil production, real regional GDP even contracted in 2016, for the first time since the early 2000s. Above all, the BEAC's direct financing of the fiscal deficit held off any macroeconomic adjustments to the drop-off in oil prices, which contributed to the rapid erosion of external liquidity. The BEAC's foreign reserves have fallen by a third over the past two years. At year-end 2016, they covered only 2.4 months of imports, whereas the IMF considers the alert threshold to be 5 months of imports for economies with a fixed exchange rate. Talks with the IMF have been engaged to reverse this trend. Cameroon and Gabon rapidly signed multiannual financing agreements. The Central African Republic and Chad were already in similar programmes, and managed to have them strengthened. The first results are encouraging. BEAC managed to rebuild its foreign reserves by nearly USD 1 bn in the second half of 2017, bolstered by ongoing fiscal consolidation efforts, a slight upturn in oil prices, and external assistance by the IMF and other donors. Key
Economic growth

![Chart 6](image)

**Economic growth**

According to the IMF, prospects should continue to improve (chart 7), although there are still numerous downside risks. Despite conservative assumptions for oil price trends (an average of USD 50 per barrel in 2018-19), nothing says that the governments will manage to reach targets set by the IMF. Negotiations are still underway for the Republic of Congo (to be concluded soon) and Equatorial Guinea, two key regional players whose macroeconomic situation has deteriorated considerably since 2015. For the moment, the improvement in external liquidity at the regional level is mainly due to Cameroon, whose 55% contribution to BEAC reserves is much higher than its economic weight (40% of CAEMC GDP). In contrast, Equatorial Guinea made virtually no contribution. The contribution from the Republic of Congo is rapidly heading in the same direction since the country must still face up to shrinking foreign exchange reserves. Chad is in a similar situation, but the country does not contribute much to the reserve pool. Without external financing for the CEMAC countries as a whole, the adjustment efforts necessary to stabilise the currency peg risk becoming even more severe, undermining an already timid economic turnaround. After two years of contraction in 2016-2017, growth is estimated at only 1.6% in 2018, before accelerating to 3.2% in 2019, which just barely matches the population growth rate.

**WAEMU: robust growth fuels macroeconomic imbalances**

At first sight, all indicators are upbeat for the WAEMU. According to the most recent estimates, the regional growth rate exceeded 6% in 2017, for the sixth consecutive year (chart 8).

**Growth rate**

![Chart 8](image)

This dynamism is all the more remarkable considering that it occurs in the midst of a tough cyclical environment for Sub-Saharan Africa, where the average growth rate (excluding South Africa) has been slashed in half since 2015. Even a comparison with the oil-importing African...
economies is now more favourable for WAEMU, which had lagged during the 2000s. The main driving forces behind regional growth were Côte d’Ivoire’s recovery after the 2011 post-electoral crisis ended, and Senegal’s turnaround, the region’s two main economies. The other countries also continued to report solid growth despite increasing tensions (insecurity in the Sahel, delicate political transitions in Burkina Faso and Mali).

Unlike many African countries, the WAEMU was barely affected by the downturn in basic commodity prices and the tightening of external financing conditions. Vigorous household consumption (low inflation, high demographic growth rates) and vast infrastructure projects continued to stimulate economic growth. Public investment has never been so high at 9.6% of GDP in 2017. Investment growth was also very strong, up nearly 3 percentage points since 2011. WAEMU is one of the rare regions of Sub-Saharan Africa where the investment ratio has continued to increase in recent years (chart 9).

Investment rate

The dynamic pace of public investment has placed severe pressures on key macroeconomic balances. In 2017, the regional budget deficit swelled to 4.8% of GDP, from less than 3% in 2012 (chart 10) despite the absence of any particular pressures on revenues (with the exception of the Côte d’Ivoire crisis in 2011) and the relaxing of spending controls (excluding investment). On the whole, current spending was kept under tight control, particularly the wage bill, whose share of the budget was flat at 25%. Yet with capital expenditure increasing 15% a year since 2012, efforts to improve tax collection and significant grants (12% of total revenues on average in 2012-17) were unable to cover the extra spending.

Moreover, infrastructure investment programmes require high needs of capital goods imports: the amount of imports in CFA francs doubled between 2011 and 2017. As a result, the WAEMU countries did not benefit fully from the sharp drop in the energy bill. The current account deficit rose to a record high of 6.8% of GDP in 2017 (chart 10). The last time the deficit was this high was in 2008, a year marked by surging commodity prices of products imported by the region. Except for a modest upturn in oil prices, this was not the case in 2017. In general, the current account deficit has crossed a new threshold, and as a corollary, external manoeuvring room has diminished.

Current account

The dynamic pace of public investment has placed severe pressures on key macroeconomic balances. In 2017, the regional budget deficit swelled to 4.8% of GDP, from less than 3% in 2012 (chart 10) despite the absence of any particular pressures on revenues (with the exception of the Côte d’Ivoire crisis in 2011) and the relaxing of spending controls (excluding investment). On the whole, current spending was kept under tight control, particularly the wage bill, whose share of the budget was flat at 25%. Yet with capital expenditure increasing 15% a year since 2012, efforts to improve tax collection and significant grants (12% of total revenues on average in 2012-17) were unable to cover the extra spending.

Moreover, infrastructure investment programmes require high needs of capital goods imports: the amount of imports in CFA francs doubled between 2011 and 2017. As a result, the WAEMU countries did not benefit fully from the sharp drop in the energy bill. The current account deficit rose to a record high of 6.8% of GDP in 2017 (chart 10). The last time the deficit was this high was in 2008, a year marked by surging commodity prices of products imported by the region. Except for a modest upturn in oil prices, this was not the case in 2017. In general, the current account deficit has crossed a new threshold, and as a corollary, external manoeuvring room has diminished.

Current account

Despite relatively stable capital flows (foreign direct investment, concessional financing by international donors), external liquidity eroded through 2016 (chart 12), when the decline was particularly sharp, undoubtedly fed by rumours on a devaluation of the CFA franc.
Since 2017, the WAEMU has begun rebuilding its foreign reserves. But at year-end 2017, foreign reserves expressed in USD were still 9% below the 2011 peak. External assets held at the BCEAO shrank from 6.6 months in 2011 to 4.2 months of imports of goods and services, which the IMF considers to be below the appropriate level for coping with external shocks. Even so, the margin is still very comfortable compared to the levels required by the CFA franc regional agreements. FX reserves still covered 76% of ST liabilities at year-end 2017, compared to an alert threshold of 20%. By comparison, in 2012 they were still above 100%.

**Fundamental problems persist**

Yet more than the level of foreign reserves, it is the dynamics that is alarming, underscoring the need to set up adjustment measures to strengthen the region’s external stability. Of course it will be very tempting to proceed with currency devaluation. Yet the game might not be worth the candle: will the long-term gains outweigh the damages caused? It is hard to respond to such a complex question, especially when situations are as divergent as this. Yet devaluation would almost certainly have an immediate impact on inflation. The abrupt devaluation of the CFA franc in 1994 triggered a sharp increase in prices, which exceeded 30% in several countries in the region. Although inflation normalised in 2015/16 due to the compression of domestic demand, the inflationary shock had major consequences from a social perspective. This is the main reason why the region’s governments are either opposed to or highly reticent about pursuing plans for devaluation.

Yet to sustain the peg, it is necessary, and even urgent for the CEMAC, to rebuild foreign reserves to a more comfortable level. One of several challenges it faces is to boost the region’s external competitiveness. Although the CEMAC is now paying a heavy price for its oil dependency, the deterioration of WAEMU’s external position also reflects how hard it is for this region to integrate into global supply chains. Another key challenge is to increase domestic resources, to contain at least the external debt, which is swelling at a worrisome pace.

**External competitiveness woes**

Despite the 1994 devaluation, the economies of the CFA franc region did not manage to improve their share of the world market for goods (chart 13). Following the drop-off in oil prices, export market share for the CEMAC fell back to the 1995 level. Over the same period, WAEMU’s export market share rose from 0.13% to only 0.15%. Moreover, WAEMU’s export ratio has held steady at 25-30% since 1995, while CEMAC’s export ratio has contracted sharply since 2014.

Export goods are not diversified enough because they are essentially geared towards the exploitation of natural resources (especially in the CEMAC countries). CFA franc zone exports did not benefit much from the boom in world trade over the past 20 years. An analysis of WAEMU’s foreign trade shows the significant weight of just a few products. Altogether, cocoa, cotton, mining products (gold, uranium and phosphate) and petroleum products (despite a net energy deficit) account for two thirds of WAEMU exports. In this region, several countries are virtual mono-exporters (chart 14), which means they are highly vulnerable to fluctuations in the terms of trade.

Most of the CFA franc countries are also lagging when it comes to other fundamental aspects of external competitiveness.

**World market share of exports**

![Chart 13](chart13.png)

**WAEMU exports (2010-2016)**

![Chart 14](chart14.png)

**Governance index (2016)**

![Chart 15](chart15.png)
In the latest World Bank Doing business survey, WAEMU countries as a whole ranked 150th out of 190 countries. Although Côte d’Ivoire and Senegal rank among the big reformers over the past 2-3 years, WAEMU still ranks just above the Sub-Saharan average (142 in 2018), even though this region has the world’s poorest ratings. With 4 of the 6 CEMAC countries ranking among the bottom 15, the situation has deteriorated even more, in line with the continent’s other oil-exporting countries (Angola, Nigeria).

The configuration is almost identical if we look at the governance indicators of the World Bank (chart 15) and World Economic Forum.

It is not surprising then that the CFA franc region is finding it difficult to attract foreign investment. Despite the Côte d’Ivoire’s turnaround, FDI flows to WAEMU barely exceed 3% of regional GDP, which is lower than for the other African oil-exporting countries (chart 16).

Moreover, Burkina Faso, Mali and Niger, the three mining countries, have absorbed half of the FDI flows since 2012. Foreign investment is still highly concentrated by sector, as illustrated by the CEMAC countries, where the amount of FDI is stable and higher than for WAEMU, although the lion’s share is geared towards the development of the hydrocarbon sector.

Foreign direct investments

![Chart 16](image)

Sources: UNCTAD, BNP Paribas calculations

Boosting the region’s attractiveness is not only the key to diversifying the CFA franc economies, it also plays an important role in ensuring more solid coverage of external financing needs. For example, FDI flows covered only 30% of the WAEMU current account deficit over the past three years. Between the lack of infrastructure and the poor quality of the institutional environment, there are vast grounds for structural reforms. The CFA franc countries would also gain from promoting regional integration, if for no other reason than to provide investors a much larger market than the current one.

Insufficient domestic resources

Another challenge that will be just as hard to meet is the mobilisation of domestic resources. According to BCEAO, the domestic savings rate of the WAEMU zone is virtually stagnant, edging up from 15.2% in 2012 to 15.7% in 2017. Over the same period, the investment ratio rose 2.6 points. In the CEMAC, there is still a significant spread between the investment ratio and the savings rate (chart 17), despite drastic adjustment efforts. Above all, public investment has fallen back to a historical low, at less than 5% of regional GDP, underscoring the lack of manoeuvring room. Although there is room for improvement on several fronts (low bank penetration rate, shallow capital markets), a key factor is the governments’ capacity to strengthen the fiscal base. With the exception of Senegal, none of the WAEMU countries managed to comply with a tax-to-GDP ratio of at least 20% of GDP (chart 18), even though some progress has been made in recent years. In the CEMAC zone, the lag is widespread and much bigger, with non-oil revenues amounting to only 11% of GDP in 2017, nearly two times less than the amount of public spending. In any case, the task will be difficult given the informal sector’s predominant weight in these economies.

CEMAC : saving and investments

![Chart 17](image)

Sources: BEAC, IMF

Without additional fiscal revenues, the WAEMU countries risk having to scale back their investment programmes to reduce the pressure on the external accounts, to the detriment of economic activity. The situation is just as urgent for the CEMAC countries, given the macro-financial pressures squeezing the region.

The deterioration of the twin deficits will necessarily strain the debt burden of the CFA franc countries. From 42% of GDP in 2010, WAEMU...
public debt has risen to 49.5% in 2017 (chart 19). For the CEMAC countries, public debt has soared since 2014 (chart 20). To make matters worse, the governments are mainly borrowing in hard currencies, and increasingly on international financial markets, even though this trend is still limited to a few countries. At year-end 2016, debt due to international private creditors accounted for 20% of the external public debt of the WAEMU countries, compared to less than 2% in 2010. Moreover, this situation is unlikely to improve given the large Eurobond issues made by the Côte d’Ivoire and Senegal in 2017 and 2018. Once again, the CEMAC countries are the most vulnerable, with a third of hard currency debt in the hands of private lenders at year-end 2016.

WAEMU: public debt

![WAEMU: public debt](chart 19)

Sources: BCEAO, IMF, BNP Paribas calculations

CEMAC: public debt

![CEMAC: public debt](chart 20)

Sources: BEAC, IMF, BNP Paribas calculations

With the exception of Congo, the debt has yet to reach alarming levels, although it has multiple consequences for the macroeconomic stability of the CFA franc zone. Debt servicing is placing an increasingly high burden on the budget (chart 21) and external accounts.

The region’s financial vulnerability is limited as long as the euro peg is not called into question and remains unchanged. Yet fluctuations in the euro/dollar exchange rate could affect solvency. The Côte d’Ivoire and Senegal have begun to issue euro-denominated bonds, and most of the USD debt raised in the international markets by the CFA franc countries was covered by euro/dollar swap operations. Yet these agreements do not take into account the risk of devaluation of the CFA franc, limiting the gains that adjusting exchange rates could have on fiscal revenues denominated in hard currencies (CEMAC with oil).

**Interest payments**

![Interest payments](chart 21)

Sources: BCEAO, BEAC, BNP Paribas calculations

Although the stability of the CFA franc has been weakened, it is unlikely to be called into question. Granted, the macroeconomic situation of the CEMAC countries has deteriorated sharply, and will require a coordinated effort by all its member countries. Unfortunately, this has not been the case so far. Yet the governments are highly determined to preserve the peg, and the international community’s support and the French Treasury’s guarantee of convertibility are both reassuring. Indeed, we are beginning to see the first effects of the CEMAC adjustment.

Yet several major challenges still lie ahead to ensure the long-term sustainability of the foreign exchange regime. Although the zone as a whole is clearly more solid than it was in the early 1990s, certain dynamics are causing concern. The booming WAEMU countries are encountering more and more financing constraints and their external imbalances deteriorate. For the CEMAC countries, it is the lack of diversification that is to blame.

The mechanisms of the CFA franc zone have evolved over time, not only in terms of the supervisory bodies but also the tools available for the two regional central banks to ensure monetary stability in their respective monetary unions. Moreover, competitiveness remained a persistent problem after the 1994 devaluation, which is a good reminder that currencies cannot do everything. Looking beyond the debate over exchange rates, there are still numerous levers for improving the functioning of the CFA franc zone, foremost of which is to strengthen intra-zone integration, which is still sorely insufficient.

Stéphane Alby
stephane.alby@bnpparibas.com

Completed on 16 April 2018
GROUP ECONOMIC RESEARCH

- William DE VILDER
  Chief Economist
  +33(0)1 55 77 47 31
  william.devilderg@bnpparibas.com

ADVANCED ECONOMIES AND STATISTICS

- Jean-Luc PROUTAT
  Head
  +33(0)1 58 16 73 32
  jean-luc.proutat@bnpparibas.com

- Alexandra ESTIOT
  Works coordination - United States - United Kingdom - Globalisation
  +33(0)1 58 16 81 69
  alexandra.estiot@bnpparibas.com

- Hélène BAUDCHON
  France (short-term outlook and forecasts) - Labour markets
  +33(0)1 58 16 03 83
  helene.baudchon@bnpparibas.com

- Frédérique CERISIER
  Euro Area (European governance and public finances), Spain, Portugal
  +33(0)1 43 16 95 52
  frederique.cerisier@bnpparibas.com

- Thibault MERCIER
  Euro Area (short-term outlook and monetary policy), France (structural reforms)
  +33(0)1 57 43 02 91
  thibault.mercier@bnpparibas.com

- Catherine STEPHAN
  Nordic countries - World trade - Education, health, social conditions
  +33(0)1 55 77 71 89
  catherine.stephan@bnpparibas.com

- Raymond VAN DER PUTTEN
  Germany, Netherlands, Austria, Switzerland - Energy, climate - Long-term projections
  +33(0)1 42 98 53 99
  raymond.vanderputten@bnpparibas.com

- Tarik RHARRAB
  Statistics and Modelling
  +33(0)1 43 16 95 56
  tarik.rharrab@bnpparibas.com

BANKING ECONOMICS

- Laurent QUIGNON
  Head
  +33(0)1 42 98 56 54
  laurent.quignon@bnpparibas.com

- Céline CHOULET
  +33(0)1 43 16 95 54
  celine.choulet@bnpparibas.com

- Thomas HUMBLOT
  +33(0)1 40 14 30 77
  thomas.humblot@bnpparibas.com

EMERGING ECONOMIES AND COUNTRY RISK

- François FAURE
  Head - Argentina
  +33(0)1 42 98 79 82
  francois.faure@bnpparibas.com

- Christine PELTIER
  Deputy Head - Brazil, China, Vietnam, other North Asian countries, South Africa
  +33(0)1 42 98 56 27
  christine.peltier@bnpparibas.com

- Stéphane ALBY
  Africa (French-speaking countries)
  +33(0)1 42 98 02 04
  stephane.alby@bnpparibas.com

- Sylvain BELLEFONTAINE
  Turkey, Latin America
  +33(0)1 42 98 26 77
  sylvain.bellefontaine@bnpparibas.com

- Sara CONFALONIERI
  Africa (Portuguese & English-speaking countries)
  +33(0)1 42 98 43 96
  sara.confalonieri@bnpparibas.com

- Pascal DEVAUX
  Middle East, Balkan countries
  +33(0)1 43 16 95 51
  pascal.devaux@bnpparibas.com

- Hélène DROUOT
  Korea, Thailand, Philippines, Andean countries
  +33(0)1 42 98 33 00
  helene.drouot@bnpparibas.com

- Johanna MELKA
  India, South Asia, Russia
  +33(0)1 58 16 05 84
  johanna.melka@bnpparibas.com

- Michel BERNARDINI
  Contact Armenia
  +33(0)1 42 98 05 71
  michel.bernardini@bnpparibas.com

BNP PARIBAS
The bank for a changing world