

## Economics in Africa: Beyond the Headlines

*A survey on the benefits and drawbacks of the France-backed currencies in Africa, the CFA Francs, and their respective economic blocs.*

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### 1. Introduction

Since the beginning of the year, France and Italy have been quarreling over EU requirements, budget deficit, immigration, art exhibits, and generally over whatever the two countries manage to not find common ground. On late January, Luigi di Maio has said that "France [...] by printing money for 14 African states prevents their economic development and contributes to the fact that the refugees leave and then die in the sea or arrive on our coasts."<sup>1</sup> He is referring, of course, to the CFA franc zones in Africa. This work seeks to assess the truth in his claim that the CFA franc hurts African economies,

through surveying the academia. Rather, it finds that there's little to no evidence the CFA weakens its member countries. Not only does it aid them, but with technocracy-lead adjustments, it can be even more useful.

This work does not tackle the international politics side of the debate. It steers away from conversations that may stem, for instance, from the knowledge that since 2000, Niger has exported almost 90% of its Uranium exclusively to France, where a significant portion of electricity is derived from nuclear power – during that period, France imported 15% of its uranium from Niger, making it the 2<sup>nd</sup> largest French source, following Russia and followed by Canada.

This work will also not go into speculations. Where it reads, for instance, there's little evidence that France manipulates the value of the currency for its own advantage, that should be interpreted solely literally; it does not mean to suggest that France has not, or would not manipulate the currency. The goal of this

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<sup>1</sup> According to publications on the BBC ("*France summons Italian envoy over Africa remarks*", on January 22<sup>nd</sup>, 2019; at <https://www.bbc.com/news/world-europe-46955006>), and The Guardian ("*Italy and France's refugee dispute awakens a dark colonial legacy*", on January 27<sup>th</sup>, 2019; at <https://www.theguardian.com/world/2019/jan/27/italy-france-refugee-dispute-awakens-dark-colonial-legacy-migration>).

paper is to be as factual as possible on the literature review, and if for any reason the reader is under the impression a verdict has been reached, I assure you that it is not the case.

## 2. Explaining CFA

The CFA Franc, along with its counterpart in the Pacific, was created in 1945 as an aftermath of the Bretton Woods Agreement. The acronym used to stand for Colonies Françaises d'Afrique, which in hindsight, judging by today's standards, does not sound very inviting. By that time, however, it was presented to the public as a way to shield French colonies from the impact of aforementioned agreement. After each country's independence, some chose to abandon the CFA, some chose to adopt or re-adopt it, and some replaced it by the French Franc, which came as part of a new political relationship with France. The group that was originally only composed of former French colonies came to include other African countries. Table 1 summarizes these events.

The countries that retained or adopted the CFA grouped themselves in two economic zones, the West African Economic and Monetary Union and the Economic and Monetary Community of Central Africa.

The first, officially known as Union Économique et Monétaire Ouest Africaine, or UEMOA, use the West African CFA, which stands for Communauté Financière d'Afrique. Its central bank is the Central

Bank of the West African States (Banque Centrale des États de l'Afrique de l'Ouest, BCEAO), located in Dakar, Senegal.

The latter, known as Communauté Économique et Monétaire de l'Afrique Centrale, or CEMAC, use the Central African CFA, meaning Coopération Financière en Afrique Centrale. Its central bank is the Bank of the Central African States (Banque des États de l'Afrique Centrale, BEAC) located in Yaoundé, Cameroon.

These two economic zones use two different CFA Franc currencies, which are not interchangeable: one is not accepted as legal tender in the other's countries. They have differences in their statutes, minor although notable, and distribute different voting rights to its members. That said, the currencies do share the same nominal value, as they hold a fixed peg to the Euro. Since its inception, the currency was pegged to the French Franc at a fixed rate regime, and ever since, there has been one devaluation only, in 1994, albeit an eventful one. The value of the currency was cut in half, prices skyrocketed and the population rioted<sup>2</sup>.

The currencies are issued by each central bank, and guaranteed by the French Treasury, which maintains two operations account, one for each. Reserves may be drawn from the accounts into overdraft, but in that

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<sup>2</sup>The episode can be recalled on the article on the New York Times, *"French Devaluation Of African Currency Brings Wide Unrest"*, from February 23<sup>rd</sup>, 1994 (at <https://www.nytimes.com/1994/02/23/world/french-devaluation-of-african-currency-brings-wide-unrest.html>)

case a fee is accrued. To maintain that system in place, restrictions include (1) at least 20% of "sight liabilities" covered by reserves (the breakdown of this liability group can be found in the balance sheets of both central banks, under "engagements a vue" in French), (2) at least 50% of reserves deposited, and (3) France's membership on the board of both institutions. Notice that the requirement applies for the central banks. Thus, this arrangement allows for member countries to pool reserves. This feature has been studied in depth by previous authors and will be again highlighted further down, when the literature is being reviewed. Similarly, the costs of maintaining the accounts and the proceeds of interest accrued over the deposits are distributed to the member countries.

The central banks conduct monetary policy within the limits of the fixed exchange regime, as any one country at that regime would. Each central bank executes its own open market operations, and their biannual meeting's records are disclosed at the respective central banks' websites as well as the website of Banque de France. They are also in charge of supervising the banking sector at the regional level, as if it were a single country (or rather yet, two), whereas politically, they are fourteen.

The zones are monetary and customs unions, meaning they share monetary policies and goods and services may navigate freely within the member countries of each group. In practice, however, this is hampered by geography, quality of infrastructure, sense of security and language.

The member countries are significantly distinct from each other in some ways, as points out Gulde and Tsangarides (Gulde, Tsangarides, 2008). Within the CEMAC, for instance, GDP per capita ranges from less than \$400 (Central African Republic) to more than \$7,000 (Equatorial Guinea). The United Nations Development Programme's Human Development Report of 2017 classifies Gabon as the highest IDH of the group with an index as high as 0.702, while Central African Republic the lowest one, 0.367. Broadly speaking, most countries in the CFA bloc sit at the bottom tier of development.

### 3. Cost-Benefit Analysis

This next section summarizes previous analyses on the costs and benefits of the CFA economic bloc, criterion by criterion. There is a rich literature on the subject, some authors opted for an overview of the group as a whole, some opted for testing specific features of these particular arrangements. A table can be found at the end of the section with an overview of the criteria. However, recalling that this work was triggered by accusations of the French government imposing an economic framework onto African countries, this chapter will start not with what makes the CFA bloc unique, but with what it has in common with other countries.

A country can choose from a wide array of currency regimes, from adopting another country's currency, through maintaining a fixed peg to a currency or basket of currencies (hard peg, soft peg, crawling

peg, etc.) all the way to a free floating regime. There are compelling arguments for every option.

Several countries have, at the time of this writing, adopted a third party legal tender, such as Ecuador (Dollar), Monaco (Euro), and Liechtenstein (Swiss Franc). Examples of a hard peg include Panama (Dollar) and Denmark (Euro). Following New Zealand's footsteps, Canada, Brazil, Australia and the United Kingdom, among others, follow a floating exchange rate regime with inflation target. Even the United States, which is considered to follow a free floating regime, have been identified as non-explicitly targeting inflation (and output, as proposed by Taylor, 1993), and lately have imposed tariffs to defend its trade balance against allegedly artificially maintained exchange rates (among other criticism). The kernel of choosing a regime is the widely known trilemma that a country cannot achieve all three goals of maintaining a fixed exchange rate, free capital movement and still be independent on its decisions on monetary policy.

Finally, there is the case of the European Union. Like the CFA economic blocs, EU monetary policy decisions are made by a supranational body, namely the European Central Bank. Unlike the EU, the CFA blocs maintain a fixed peg (to the Euro), but also differently, and perhaps more controversial, they have chairmen representing a country that does not use its currency, France.

The French government used to hold a third of the seats on BCEAO and half the seats of BEAC. After a

statute reform in the 1970s, those numbers changed to 2 out of 16 and 3 out of 13 respectively. Nonetheless, that did not come with any changes to the full convertibility pledged by the French Treasury. Furthermore, Stasavage argues the African chairmen whose voting power filled that void had direct ties to its respective governments, severely hindering the independence of the central banks (Stasavage, 1997). Indeed, in both central banks, governors and chairmen are members of each country's governments, appointed by its respective executive branches, leaving no room for the private sector and other members of the financial markets to have a saying. He goes further to suggest that, even if France had significant voting power to go against its fellow members, they too had political interests in mind instead of economic ones. It seems France felt that keeping good relationships with each country's rulers was worth jeopardizing the stability of the bloc in the 80's, allowing for fiscal indiscipline and postponing (thus intensifying) what he considered a unavoidable devaluation, worsening its effects.

Central Bank independence is the first criterion to be pointed out by this work. In theory, having a supranational central bank promotes independence from any one government, allowing for decisions that truly have the common welfare for the long run in mind, rather than partisan, short term goals. Without it, what unfolded during the 80's, still according to Stasavage's work, was a steadily growing fiscal imbalance. The central banks started financing local governments through indirect means, such as

lending to state run development banks. With a shared access to overdraft, countries who maintained a surplus paid for fiscally irresponsible ones, thus adding moral hazard to the mix. Further moral hazard lies on the guarantee itself: the confidence that extreme excess indebtedness will lead to a bailout. Common sense says rules should be adjusted to ensure a linear payoff of benefits and penalties. There can be no upward end curve where the very worst performer reaps the highest reward. Stasavage defends that these rules are not properly tuned for that purpose.

During the crisis, the CFA statutes proved to be ineffective at best. Even though there is a ceiling on advances to local governments, the specifics of this rule leave exploitable gray areas, and there are no explicit penalties in case of violation. France was either incapable of or unwilling to prevent the crisis. Stasavage points out that French Treasury officials have relatively short terms, and little incentive to push for long term solutions. Either way, the episode in the 80's-90's did away with whatever layer of credibility the French Treasury guarantee was adding to the analysis of international investors.

The French Treasury guarantee has a self-evident positive side, it provides added certainty to the international investor, pushing lending rates down. It can be debated, however, whether the binding clauses that come with such guarantee are too steep of a price to pay. This price includes the cost of maintaining the operations accounts and the cost of maintaining reserves. The fixed exchange regime

will not be considered part of the cost for this analysis. Third party underwriters may exist regardless of exchange rate regimes, and the fixed peg has its own list of pros and cons, so this piece will be saved for last.

Every major economy saves a portion of foreign reserves in case its balance of payments is impacted by an external shock. The IMF suggests that metrics be adopted by central banks on maintaining enough reserves to cover for a set number of months in foreign currency denominated liabilities, government debt obligations, and importers' cash flows. The question becomes then whether or not the French backing creates an incentive to hold less than optimal reserves. Countering that proposition, an IMF analysis concluded African countries hold proper reserves, higher than the threshold cited on the unions' statutes (Gulde, Tsangarides, 2008). In fact, it is even found that, not surprisingly, being able to pool their reserves together among CFA union members actually reduces the need for holding reserves individually, on the (historically safe) assumption that it is unlikely that all members will be equally in need of them simultaneously (Allechi, Niamkey, 1994). That noted, some countries are consistently net winners and some net losers when accounting the opportunity cost of setting aside foreign reserves. Same goes with the maintenance cost of the operations accounts, especially considering that proceeds from interests or payments of fees are distributed by the members regardless of their individual contributions. Perhaps

an individual floor of reserves to be set in conjunction with the pool limit could strengthen the group by promoting fairness, once robustness is already achieved on this particular set of criteria.

The issues pointed out by the aforementioned authors may suggest, as an alternative view, that it is not so much as the accords were flawed, but the African member countries were not as integrated as required for the bloc to fully function. When compared to the European Union, the CFA unions did not foster trade integration between its member countries, nor businesses cycles correlation (Zhao, Kim, 2009). Gulde and Tsangarides highlight physical obstacles to integration. Geography can be cited as an example. For instance, 5 of the 14 countries are landlocked. Other relevant features include insufficient transportation and local conflicts (Sachs, 2003). The fact that most if not all countries are equally primarily commodity exporters also does not bolster exchange. On financial integration, the IMF researchers see some evidence of improvement, such as convergence of interest rate spreads across countries, and (mostly) standard bank practices brought by having a common regulator. However, the evidence is mixed. Other bank practices, most notably legal reserve ratios, are still less than optimal for some countries. As another counter-example of financial integration, the authors point to specific but persistent deviations from the law of one price. These would be better addressed by fine-tuning policies and legal frameworks rather than disbanding the CFA franc

altogether: Regional integration has to be deepened and constraints on investment reduced, not the other way around. As further argument, Tsangarides et al. apply a very thorough augmented gravity model to find long-term trade creation due to shared currency, higher than expected in magnitude (Tsangarides et al., 2009). Sharing a common language seems to be equally important, as well as sharing land borders, even with a country outside of the bloc.

For the purpose of completeness, referring back to business cycle correlations, here lies yet another criterion for judging the CFA unions. As mentioned previously, these African economies are not considered diversified, which hinders intra-regional trade (Couharde et al., 2013). On the other hand, a negative effect of a common currency area is the lost ability to respond to country specific shocks. Despite that risk, a glance on the main exports of these countries suggests many external shocks would affect most countries in a relatively similar matter. Naturally, it would be best to have diversified economies, coordinated members, and labor and capital mobility as mitigating factors of the aforementioned downside of a common currency area instead. But it turns out these negative effects end up cancelling each other.

Table 2 lists main exports of each country. The last ten years were considered, but the percentages displayed are those of 2016. All information comes from MIT's Observatory of Economic Complexity.

Trade is a hotly debated topic in discussions about economic zones, especially in regards to the CFA block, considering that France has seats on both central banks. If France were to force trade to swing favorably its way, there are some ways they could do it using their voting powers. They could either push for bloc-wide tariffs or push for a favorable exchange rate. Either way, France does not have - by far - the majority of votes, so to achieve that, they would require some sort of political pressure (in which case, the CFA would cease to be a tool for trade manipulation in favor of direct political pressure).

Focusing instead on the exchange rate, some considerations have to be made. The rate has been changed only once, after (i) most researchers on the subject had called for it (Allechi, Niamkey, 1994; Stasavage, 1997), and (ii) long after France had given up most of its voting power. This by itself should serve as exhibit A of lack of rate manipulation. Secondly, there's evidence that – working with the assumption that fixed rate regime is given, an assumption that will be studied later down this paper – the rate is not far from what it really should be.

Several authors attempt to cross-check the exchange rate with its equilibrium value. As it is usually done, these authors calculate the real effective exchange rate (REER), which takes into account the differential on inflation figures between two countries, further enhancing it by weighting the average with trade depth. This time series is then compared, broadly speaking, to an expected long

term equilibrium. One such measuring stick is the fundamentals effective exchange rate (FEER), which estimates REER as a function of macroeconomic fundamentals. One analysis found rates to be mostly in line with factors such as terms of trade, government consumption, productivity, investment and openness (from 1970 to 2005), and while there is no evidence of persistent misalignment, they found significant differences in the alignment speed after an external shock (Gulde, Tsangarides, 2008). Mignon and Couharde - who have an extensive literature on rate misalignment - also have analyzed the CFA currencies. They used a behavioral model (BEER) which contains an error correction component (VECM). They assess external balance, terms of trade, and productivity (calculated as the PPP-adjusted GDP per capita), using other sub-Saharan countries as control group. They conclude there is stronger evidence for fundamentals-driven currencies in the CFA blocs than outside it, and attribute that to a properly anchored monetary policy (Couharde et. al., 2013). Gnimassoun updates this model and finds similar results, but points out from the data that occasional misalignments impact these countries asymmetrically (Gnimassoun, 2017). Production means are not mature enough for these countries to take advantage of periods in which the currency is undervalued (and thus exports demand is higher).

Finally, before jumping to the next set of criteria, exchange rate regime, it is worth analyzing each of the countries trading partners. Granted, most

countries in the CFA area have run deficits with France and the EU, but so have most of them run deficits with the USA and China. Same goes with other African countries that are not part of the CFA bloc, including former French colonies in West Africa such as Mauritania and Guinea. An extension of the existing work could be an analysis on each African country's trade balance to check whether or not there's consistent difference between CFA members and not CFA members. Table 3 lists importers and exporters for each CFA country from 2008-2017.

France clearly is representing more of the CFA countries' imports than exports. Not shown in the table, France figures in 4th or 5th export destination for other five countries, Cote d'Ivoire, Senegal, Cameroon, Chad and Equatorial Guinea. That is not caused by currency imbalance. France uses the Euro since 1999. If this were due to the exchange rate being set favorably to France's trade balance, other Euro Zone countries should figure as much as France in the table, or at least in a similar proportion of importers to exporters. Furthermore, the careful observer will notice that Portugal and Spain replace France on the imports' origins side for Guinea-Bissau and Equatorial Guinea, respectively, suggesting this relationship is more a function of language, people and institutions that had come during the period these countries were colonies, or any other reason unrelated to the subject of this paper, the CFA Franc (especially considering this share was much higher in the past; Yehoue, 2007).

Naturally, even if rebuffed, the accusation of exchange rate misalignment or manipulation would not even take such a significant place in the spotlight if the exchange rate regime were not that of a peg, especially after so many developing or emerging countries abandoned the fixed rate regime and rewrote its central banks' mission statements.

Fixed exchange rates used to be the norm in the past. It anchors expectations and limits the impacts external shocks have on inflation. They do not, however, limit the impact external shocks have on output. Countries such as Mexico, Thailand, Russia and Brazil, found themselves forced to abandon its peg in the 90's due to precisely those external shocks.<sup>3</sup> Being the CFA countries exposed to these same external shocks, to the same volatility of the US Dollar as any other country in the world, it would make sense for the CFA regime to be switched as well. It would give the bloc the flexibility to actively (rather than passively) pursue a target on output and inflation, for instance. In spite of that apparent benefit, there is evidence that the fixed regime has brought significant gains to the bloc. Devarajan and Rodrik find lower inflation rates for the CFA countries throughout the 70's, sided with better growth rates as well (Devarajan, Rodrik, 1991). Unfortunately, during the 80's, though inflation was still low, the bloc was faring worse in output terms than its African peers (there is more than one explanation for that, and the history of the bloc has been covered earlier

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<sup>3</sup> The debate on exchange rate regime is an extensive one, and any attempt to address it as a side note of the CFA discussion is bound to be an oversimplification.

in this work). Yet, Yehoue provides evidence of lower inflation from the 90's onwards as well, in comparison to other African countries. He also suggests that France has been absorbing indirectly these aforementioned shocks, not only through the CFA arrangement, but also to the terms of trade between the two: France's exports to the CFA are insignificant compared to total exports, but they are very significant when put in context to the CFA imports.

On the other hand, exchange rate flexibility can be a liability as much as a benefit. Governments may be inclined to pressure central banks to use such flexibility to overheat the economy. Exchange rates could be artificially depreciated to generate a boost in exports, with no means to support it at such high level on the long term. Indeed, exchange rates play a small role in trade competitiveness (Guèye et al., 2019), backed by the evidences in the IMF's paper that the bloc's competitiveness issues are mostly structural (Gulde, Tsangarides, 2008). Yehoue points out that it would be beneficial for exports if there was a more developed credit market integrated to the bloc's financial market, more so than meddling on the rate.

All in all, the exchange regime seems to be less of unanimity than every other criterion of the CFA zone. Allechi and Niamkey, Devarajan and Roderik, Gulde and Tsangarides, among others, defend that the exchange rate regime should be change, though most reckon other amendment to the arrangement that should be brought in conjunction. Gnimassoun

proposes a middle ground with a double anchor. As noted above, other suggestions include boosting the credit market, de-politicizing the central banks, investing in infrastructure and national security and rewriting the terms under which proceeds and fees (and voting powers) are distributed among members.

#### 4. Concluding Remarks

Table 4 is a summary of the criteria discussed throughout this survey. Through the judging criteria summarized in the aforementioned table, to the enhancement suggestions listed on the above paragraph, the works published in economic journals found by this survey, be them from French universities, other European ones, African, as well as Americans, all defended that the benefits of the CFA franc zones have outweighed the costs in the past, and continue to do so now. Surely, all have suggestions of improvements. As sanely noted Bissau-Guinean Carlos, Lopes, former executive secretary of the United Nations Economic Commission for Africa, no country should have an economic policy that has been unchanged for over thirty (soon to be forty) years.<sup>4</sup> However, no academic author suggested to, as some have put it, "*jeter le bébé avec l'eau du bain.*" Yet, newspaper articles did not seem to have any difficulties in finding those who defend ending the CFA and breaking bonds with France.

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<sup>4</sup> "*Carlos Lopes quitte la commission économique pour l'Afrique*", from September 29<sup>th</sup>, 2016 (at [https://www.lemonde.fr/afrique/article/2016/09/29/carlos-lopes-quitte-la-commission-economique-pour-l-afrique\\_5005478\\_3212.html](https://www.lemonde.fr/afrique/article/2016/09/29/carlos-lopes-quitte-la-commission-economique-pour-l-afrique_5005478_3212.html))

As mentioned, this author did not go into international politics speculations, so this work is not as comprehensive as to stand alone with its references. That said, Luigi di Maio would enrich his economic opinions, if desired, by adding to his repertoire some specialized literature.

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6. Annex tables

1. Periods of membership of CFA users. Omitted from the “joined” column are all countries who were members from the start, even before achieving country integrity. Similarly, the same concept goes for independence date in the last column (e.g. Cameroon).

	Country	Joined	Left	Re-joined	French franc	Independence
NO LONGER MEMBERS	Guinea		1960			1958 (from France)
	Madagascar, Mauritania		1960			1960 (from France, both)
	Saint-Pierre and Miquelon				1974	Overseas territory of France
	Réunion				1975	Overseas region of France
	Mayotte				1976	Overseas region of France
UEMOA	Benin					1960 (from France)
	Burkina Faso					1960 (from France)
	Cote d'Ivoire					1960 (from France)
	Guinea-Bissau	1997				1974 (from Portugal)
	Mali		1962	1984		1960 (from France)
	Niger					1960 (from France)
	Senegal					1960 (from France)
	Togo					1960 (from France)
CEMAC	Cameroon					1960 (France/England)
	Central African Rep.					1960 (from France)
	Chad					1960 (from France)
	Congo					1960 (from France)
	Equatorial Guinea	1985				1968 (from Spain)
	Gabon					1960 (from France)

2. Top 3 exports of each country from 2008-2017. If the fourth place was over 5% of overall exports, it was included as well. For a better visibility of values, products with a (\*) mean over 10% of overall exports, (\*\*) implies over 25%, (\*\*\*) implies over 50% and (\*\*\*\*) implies over 75%. GDP, exports to GDP (“X%”) and imports to GDP (“M%”) are displayed in USD MM, as of 2016. For a better visibility of values on imports and exports over GDP, each (\*) means 20 percentage points after rounding. Source: <https://atlas.media.mit.edu/en/>

Country	Primary Exports				GDP	X(%)	M(%)
Benin	Refined petroleum *	Cotton *	Nuts *	Gold *	\$8.6B	13%*	50%***
Burkina Faso	Gold ***	Cotton *	Palm oil & oily seeds		\$11.7B	36%**	19%*
Cote d'Ivoire	Cocoa & related products **	Petroleum (refined and crude) *	Rubber		\$36.4B	28%*	23%*
Guinea-Bissau	Nuts ****	Fish & seafood	Crude petroleum		\$1.16B	24%*	28%*
Mali	Gold ***	Cotton *	Cattle/sheep/goats		\$14B	33%**	33%**
Niger	Uranium **	Refined petroleum *	Tobacco *		\$7.5B	16%*	12%*
Senegal	Refined petroleum *	Fish & seafood *	Cotton	Phosphorus-based chemicals	\$14.7B	21%*	54%***
Togo	Gold *	Refined petroleum *	Cotton	Cocoa & related products	\$4.4B	41%**	45%**
Cameroon	Crude petroleum **	Wood *	Cocoa & related products	Bananas	\$32.2B	11%*	18%*
Central African Rep.	Wood ***	Diamonds *	Cotton		\$1.76B	9%	13%*
Chad	Crude petroleum ****	Refined petroleum	Cotton		\$9.6B	16%*	27%**
Congo	Crude petroleum ***	Naval equipment	Copper		\$7.83B	63%***	58%***
Equatorial Guinea	Crude petroleum ***	Petroleum gas *	Wood		\$10.7B	43%**	7%
Gabon	Crude petroleum ***	Manganese ore *	Wood		\$14.2B	25%*	15%*

3. Importers of products from, and exporters to, each CFA country from 2008-2017. France, Euro Zone countries, and other CFA members are highlighted. Each (\*) represents 10 percentage points of the total of exports or imports.

	Country	Top 3 export destinations			Top 3 import origins		
WAEMU	Benin	India **	China *	Mali *	China ***	USA *	France *
	Burkina Faso	Switzerland ****	India *	China	Cote D'Ivoire *	France *	China *
	Cote d'Ivoire	Netherlands *	USA *	Germany *	Nigeria **	France *	China *
	Guinea-Bissau	India ****	Vietnam *	China	Portugal ***	Senegal **	China *
	Mali	S. Africa ****	Switzerland *	UA Emirates *	Senegal **	France *	China *
	Niger	France ***	Nigeria **	USA *	France **	China **	USA *
	Senegal	Mali **	India *	Switzerland *	France *	China *	Nigeria *
	Togo	Burkina Faso *	Nigeria	India	BeNeLux **	China **	France *
CEMAC	Cameroon	BeNeLux *	Spain *	China *	China ***	France *	Nigeria *
	Central African Rep.	China **	France **	BeNeLux *	BeNeLux **	France **	S. Korea *
	Chad	USA ****	China *	Japan	China **	France **	Cameroon *
	Congo	China ***	USA **	France *	France *	China *	Angola *
	Equatorial Guinea	China **	USA *	Spain *	Nigeria ***	Spain *	China *
	Gabon	USA **	China **	Japan *	France ***	China *	BeNeLux *

4. Summary of pros and cons of the CFA bloc, together with the discussed mitigating factors

Criteria	Cons	Mitigating factor	Pros	Mitigating factor
Central Bank independence			Supranationality reduces risk of partisan decision making	In the CFA bloc, board is void of private sector and subject to government commands
French membership	French officials may not hold the welfare of the African country's citizens a priority	African officials may just as much be subject to shady interests	Third parties promote independence and reduce risk of partisan decision making	French officials may also be subject of government commands
French Treasury guarantee	Creates moral hazard risk for member country's governments		International credibility, increased borrowing access at lower rates	International markets will take cues from any other criteria in regards to credibility
Shared reserves	Incentive for chronically deficient countries to live at the expense of healthy ones	Statute can be adjusted to limit government deficits as much as it floors reserves	Reduces individual requirements (same rationale of an insurance system)	Unless all countries simultaneously face deficit balances
Shared expenses & proceeds	No incentive to hold a surplus budget (or deficit) higher than average		An individual country in crisis can count on its peers for support	
Trade integration	Unrelated to monetary and customs unions, trade integration is further hindered by geography, local conflicts, and lack of diversified economies		Monetary and customs unions foster trade integration and cost reduction	CFA blocs provide mixed evidences in comparison to other unions
Financial integration			Monetary and customs unions foster financial integration and credit markets efficiency	CFA blocs provide limited evidence when compared to other unions
Country specific shocks	Common currency areas struggle to respond to country specific shocks	Would be mitigated if CFA bloc had labor and capital mobility and diversified economies	Effect minimized by the shared export products	CFA blocs lack coordinated members
Anchor currency	Limits monetary policy flexibility	Countries that lack political discipline benefit from keeping their government in check	Anchors expectations internally and externally	
Trade impacts	Exchange rates could be used as a means to favorably adjust terms of trade	CFA productivity limitations are chronically structural, limiting ER impacts in the long run	Little to no evidence of persistent/intentional exchange rate misalignments	Occasional misalignments cause negative asymmetrical impact
Fixed exchange	Central banks have limited resources at hand to protect output from external shocks	Defending output and price stability requires independence from political pressure	Central banks are passively tied to the commitment of inflation under control	
Anchored expectations			Anchored expectations reduce price instability and allows for steady GDP growth	

