

### Slide 3 (Intro):

Alright so let's get a little introduction about the topic. I don't want to start by just relaying statistics about the currency collapse, but rather I want to dive into history to understand the underlying problems that made the currency collapse occur. So we can dive all the way back to World War 1. All that we need to know is that following WW1, Lebanon was a French territory, and they aimed to establish independence from France. Around 1940, they officially established independence after a long struggle, where France was pressured by the U.S., and other major countries who supported Lebanon. Okay, so why is this relevant to the currency collapse? Well, after establishing independence from France, Lebanon was able to implement their own form of government. This was a government based on religious sectors. There were three main groups; Sunni Muslims, Shia Muslims, and Maronite Christians, and their positions in a governmental hierarchy were based on the percentage of the Lebanese citizens that their religious sector represents. The issue arises because the population census that was used to form this government was from 1932, and outdated, so Maronite Christians were given a disproportionate share of power based on their actual population at the time. Other variances in power caused other tensions, but really the idea here is that the government system had deep rooted problems. Moving on from this, the disproportionate representation led to a civil war. This war was extremely devastating. It lasted 15 years, and wiped out numerous resources, completely depleted infrastructure, and tanked basic life needs, such as education and electricity. The economy was in shambles. The religious leaders became warlords and militia, and ultimately the country was run by selfish hateful people who only acted to serve their sectors. However, the war needed to end. Although not a smooth landing and somewhat necessary for survival, the agreement they came to is now in order to invoke reforms and policies, a consensus vote needed to come together across all of the religious leaders. In theory this would work, but deep hatred still was rooted within all the leaders towards one another, so ultimately very few economic reforms actually took place, and especially did not take place for the betterment of the country but rather the own self interest of the leaders and their sectors. So, after being devastated from a war, they had to rebuild, but they didn't have a plan. They covered all of their holes by borrowing massive amounts of money from foreign countries and countries obliged because they offered extremely high interest rates, which only worsened their situation. For years the country was upheld by immense borrowing. The economy was somewhat functional, as long as people continued to invest, and at one point they even were able to build up some reserves. However economic progress slowed when the neighboring Syria underwent their own war. Since the system was holding up, citizens and investors could ignore the statistics that seemed unlikely to end well. That was until late 2018, where the actual policymakers, seeing this massive debt number, tried to raise revenue with a WhatsApp tax. This tax equated to USD was roughly \$6 per month, and was taxed based on WhatsApp calls. Although this was small, it was received by investors and the general public as desperate, and people became more aware of the dire situation. Basically all investment pulled out, so the country had no way to continue to fund to cover up all of their problems and although we will look at how this specifically affected particular economic concepts, the main idea is that they now resorted to printing massive amounts of money to cover for this absence of investment, causing hyperinflation and the value of the currency to almost fully collapse. Here when we say exacerbated by currency controls and bank crisis, essentially, initially when the WhatsApp tax

decreased confidence for investors, and people began to panic, they tried to take their money out of the bank and get it out of the country, but banks had already lent that money to the government, so accounts froze, and banks imposed capital controls so no money could also even be moved, and ultimately this only decreased investor confidence since they saw how desperate the government was.

#### Slide 7 (NCO and BOP):

Okay so now let's look at how this currency crisis is reflected in terms of net capital outflow and balance of payments. So again it's crucial to understand where the country stands before a currency collapse. The government, without economic reforms, was borrowing tons of money from abroad to cover up holes in their financial system. All of the money that was flowing into the country was immediately being spent. From terms of NCO, we can imagine from our class that  $NCO = S - I$ , savings minus investment, so here, savings were actually negative, since public saving is  $G - T$ , government spending minus tax revenue, and the government was spending actually more than it had, and all of this was funded by investors. They raise very little revenue, since citizens were very poor, so imagine a very negative  $G$ , and a very small positive  $T$ , and you get a negative overall savings. From an investment standpoint, investment pre crisis was about 20% of the GDP, this is because when offered high interest, people were willing to invest, and because with a pegged exchange rate that was upheld for years, a lot of Lebanese family member outside the country would send USD to their family members within the country. So now, NCO has negative savings minus positive investment so they very much have net capital outflow. From a balance of payments standpoint, we know that the current account is made up of net unilateral transfers, net factor payments, and net exports. Here, net exports was massively negative and thus the current account deficit was massively negative. This is because all the country was doing was importing and  $NX = EX - IM$  so  $NX$  outweighed all of the positives from  $NUT + NFP$ . The financial account was able to match this is an unconvoluted way for the most part pre-crisis. They had a ton of capital flowing into the country to cover their losses since investment was so high. The story changes immediately post currency collapse. Here, the main effect like we have reiterated a lot is that investment was wiped out. So when it comes to the  $NCO = S - I$  equation, that negative number for NCO should be a lot smaller. Investment did not drop to 0 but it dropped from 20%ish to roughly 5%, savings were still negative since the government was still trying to get out of an economic deficit and spend more than it raised, and people were taking as much capital or in other words money out of the country as possible to protect it. So, capital was fleeing the country in a sense, yet still, the country was a state of net capital inflow because that was the only way they could survive. As long as savings are negative, NCO will always be negative. From a balance of payments standpoint, the data is a little convoluted in the immediate years following the crisis since accurate logging was not a priority of the government. In general the current account layout did not change much. They were still borrowing, as they had no other options, so its deficit was negative, but not as much. This is somewhat because IMF bailed them out with lump sums and the US adjusted their exchange rate with the Lebanese pound to also provide relief. financial account with much less inflows was accounted for with pretty sketchy money movement. The omissions and errors section was very large, and we can assume some unorthodox methods were able to reach the technical inflow balance required. A lot of their reserves were also

depleted during this time to cover losses. Ultimately, the underlying problems still remain today. Lebanon is still facing borrowing deficits from the war and investment specifically from family members is something they've had to rely on heavily to slowly dig themselves out.

#### Slide 11: AS and AD

Alright so now I am going to try to complete my analysis for the slide as a whole let me know what you think: Alright so now we are going to describe how the currency collapse pertains to aggregate demand and aggregate supply. I am going to start in the short term and then talk about long term implications. So in the short term pre currency collapse, we can say that aggregate demand and supply were in a relatively healthy equilibrium. Output and price levels weren't great, but they were manageable. Demand was held up mostly because there was still confidence in the government at the time, so consumption and investment were pretty standard. Government spending was very high, as we've seen earlier, as they were constantly borrowing and spending, and net exports were very negative. However these two offset one another for the most part, and a still stimulated economy in terms of consumption and investment allowed for healthy demand. From a supply standpoint in the short term, one thing I didn't mention earlier was the pegged exchange rate that the Lebanon had with US dollars. Essentially this exchange rate was set in the late 90s, and since that time, Lebanon currency depreciated and the exchange rate held. So less valuable Lebanese pounds still equated to the same dollar exchange. Basically since pre-crisis, the Lebanese had a steady flow of US dollars, the central bank was able to promise to citizens and firms that they could always trade pounds for dollars at this rate in an attempt to stimulate the economy short term. This also applies to the NCO concepts I described before, but it is very evident here for this concept as now firms can import the goods they need cheaply by trading their pounds for dollars, and uphold the supply they output. Alongside governments supporting firms through borrowing debt, input prices could remain relatively low, wages and capital were affordable and supply could match demand. Now, after the currency collapse: we have already mentioned that basically consumption and investments stopped. So both of those dropped drastically. On top of that, government spending took a hit, since there was less foreign inflows supporting it, and printing money was the main thing keeping them afloat but this was more risky. Net exports also became less negative, as we talked about earlier with NCO. So basically everything on the demand side all cause the curve to severely shift leftward. In terms of supply, when panic set in after the Whatsapp tax, inflow of dollars stopped. This means that all of those reserves of dollars were forced to be depleted, and therefore the peg broke. The central bank could no longer promise the pegged exchange rate to consumers and firms so upholding supply by importing what was necessary was no longer possible. Alongside this infrastructure issues started to surface with electricity outages and non functional capital. So supply also took a big hit, and experienced a large leftward shift. So, with decreased output, prices were also rising, and stagflation was occurring. So now let's look at the long term implications of the currency collapse in terms of supply and demand. These could change in the future but as it stands, it seems as though the economy is set for lower long term GDP and higher price levels in the long term going forward. LRAD reflects the same demand we have talked about, and as of now, a few years removed from the currency collapse, Lebanon hasn't given consumers and investors many more reasons to stimulate the economy. The

numbers for investment and consumption are still lower than they were pre-collapse and the country is still continuing to borrow. They are only digging themselves a deeper hole. In terms of LRAS, controlled by Land labor and capital, capital was essentially wiped out by the currency collapse, and infrastructure continues to falter. Not only this but there is a serious brain drain occurring. There are many smart people in Lebanon who are leaving the country because they realize life is better elsewhere so labor is leaving and the skills of labor remaining is worsening. So Long run aggregate supply is also much lower. Prices are still rising, alongside inflation, alongside the percentage of people in poverty, and despite efforts of support from outside countries, unless the underlying government system changes where leaders become economically versed and interested in cooperating it is unlikely things change