SHOULD TURKIYE ADAPT USD AS ITS DOMESTIC CURRENCY?

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Rezumat: Dolarizarea este vizibilă în țările în curs de dezvoltare, predispuse la inflație ridicată și la devalorizarea monedei locale în raport cu monedele puternice. Actorii de pe piață solicită monede puternice ca mijloc de păstrare a valorii și se distanțează de moneda locală. De-a lungul anilor, epuizate de devalorizări continue și inflație ridicată, țările își transformă monedele locale în monede puternice fie prin conversie oficială, fie prin adoptarea acestora de către actorii de pe piață și de către public. Dolarizarea este în desfășurare de mult timp în Turcia. În istoria sa economică, au existat numeroase devalorizări și inflații ridicate. Moneda sa nu mai este un mijloc de păstrare a valorii. Lucrarea explorează două alternative: una este instituirea unui consiliu monetar (currency board), iar cealaltă este înlocuirea lirei turcești (TL) cu dolarul american (USD). Concluzia este că înlocuirea TL cu USD ar fi cea mai bună soluție pentru a aborda crizele economice continue din Turcia. În plus față de înlocuirea monedei, se sugerează economisirea de către guvern și împrumuturi de la FMI ca parte a soluției propuse.

Cuvinte cheie: Inflație, dobânzi, devalorizare. dolarizare, austeritate.

Abstract: Dollarization is visible in developing countries that are prone to high inflation and local currency devaluation against hard currencies. Market makers demand hard currencies as store of value and distance themselves from local currency. Over the years, worn out due to continuous devaluations and high inflation, countries convert their local currencies to hard currencies either through official conversion or adopting it by market makers and public in general. Dollarization has been underway for a long time in Turkiye. In its economic history there has been many devaluations and high inflations. Its currency is no longer a store of value. The paper explores two alternatives. One is establishing a currency board and the second being if the USD can be a replacement currency for TL. It concludes that replacing TL with USD will be the best solution for Turkiye's continued economic downturns. Along with currency replacement, should come the government savings and borrowing from IMF as part of the suggested solution.

Key words: *Inflation, interest, devaluation. dollarization, austerity.*

JEL CODE: E31, E43, E64, F31

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1. Introduction

Turkiye has been suffering high inflation and devaluations in many years since it liberalized its economy in 1980. Here are various statistics between the years 2000 and 2023:

Table no. 1 – Macroeconomic Statistics of Turkiye Between the Years 2000 and 2023

									Current								FDI Net
									Account							Corruption	Inflow to
									Deficit Billion	Foreign Debt	Turkiye GDP	Foreign	Annual GDP	Population	GDP Per Capita	Perception Index	Turkey
	Date	CPI %	ENAG %2	USD (\$)1	\$ Devaluation %	Euro (€)	€ Devaluation %	€/\$ Parity³	\$ ⁴	Billion \$6	Billion \$8	Debt/GDP	Growth Rate	(million)9	(nominal \$)	Ranking 10	Billion \$11
1	Dec. 31, 2000			0.66		0.63					274.3						
2	Dec. 31, 2001	68.53		1.44	118.18	1.28	103.17	0.88	1.9	112.9	202.2	0.56	-0.26	64.2	3,150	54	3.35
3	Dec. 31, 2002	29.75		1.64	13.89	1.72	34.38	1.05	-0.3	129.5	240.2	0.54	0.19	65.15	3,687	64	1.08
4	Dec. 31, 2003	18.36		1.39	-15.24	1.76	2.33	1.26	-2.4	144.0	314.8	0.46	0.31	66.09	4,763	77	1.70
5	Dec. 31, 2004	9.32		1.34	-3.60	1.82	3.41	1.36	-3.5	159.6	409.1	0.39	0.30	67.01	6,105	77	2.79
6	Dec. 31, 2005	7.72		1.34	0.00	1.59	-12.64	1.18	-4.1	173.6	506.2	0.34	0.24	67.9	7,455	65	10.03
7	Dec. 31, 2006	9.65		1.4	4.48	1.85	16.35	1.32	-5.6	211.0	555.1	0.38	0.10	68.8	8,068	60	20.18
8	Dec. 31, 2007	8.39		1.16	-17.14	1.71	-7.57	1.47	-5.4	260.0	680.5	0.38	0.23	69.6	9,777	64	22.05
9	Dec. 31, 2008	10.06		1.52	31.03	2.13	24.56	1.39	-5.1	290.5	770.8	0.38	0.13	70.4	10,949	58	19.85
10	Dec. 31, 2009	6.53		1.49	-1.97	2.14	0.47	1.44	-1.7	278.8	648.8	0.43	-0.16	71.3	9,100	61	8.59
11	Dec. 31, 2010	6.4		1.54	3.36	2.05	-4.21	1.33	-5.7	300.9	776.6	0.39	0.20	72.3	10,741	59	9.10
12	Dec. 31, 2011	10.45		1.89	22.73	2.44	19.02	1.29	-8.9	305.5	838.5	0.36	0.08	73.4	11,424	61	16.18
13	Dec. 31, 2012	6.16		1.78	-5.82	2.35	-3.69	1.32	-5.4	338.8	880.1	0.38	0.05	74.6	11,798	54	13.74
14	Dec. 31, 2013	7.4		2.13	19.66	2.93	24.68	1.38	-5.8	390.4	957.5	0.41	0.09	75.9	12,615	53	13.56
15	Dec. 31, 2014	8.17		2.32	8.92	2.83	-3.41	1.21	-4	406.1	938.5	0.43	-0.02	77.2	12,157	64	13.34
16	Dec. 31, 2015	8.81		2.92	25.86	3.18	12.37	1.09	-3.1	400.0	864.1	0.46	-0.08	79.6	10,856	66	19.26
17	Dec. 31, 2016	8.53		3.52	20.55	3.71	16.67	1.05	-3.1	410.0	869.3	0.47	0.01	81.0	10,732	75	13.84
18	Dec. 31, 2017	11.92		3.77	7.10	4.52	21.83	1.20	-4.7	457.3	858.9	0.53	-0.01	80.3	10,696	81	11.19
19	Dec. 31, 2018	20.3		5.28	40.05	6.04	33.63	1.14	-2.6	447.9	779.7	0.57	-0.09	81.4	9,579	78	12.45
20	Dec. 31, 2019	11.84		5.94	12.50	6.66	10.26	1.12	1.4	444.5	759.5	0.59	-0.03	82.6	9,195	91	9.55
21	Dec. 31, 2020	14.6	36.72	7.42	24.92	9.12	36.94	1.23	-4.4	441.1	720.1	0.61	-0.05	83.4	8,634	86	7.70
22	Dec. 31, 2021	36.08	82.81	13.33	79.65	15.09	65.46	1.13	-0.9	435.4	817.5	0.53	0.14	84.1	9,721	96	13.33
23	Dec. 31, 2022	64.27	137.55	18.7	40.29	19.93	32.07	1.07	-5.4	459.0	905.8	0.51	0.11	84.9	10,669	101	13.09
24	Dec. 31, 2023	64.77	127.21	29.44	57.43	32.57	63.42	1.11	-2.7 ⁵	482.6 ⁷	1,154.6	0.42	0.27	85.8	13,457	115	9.612

- All rates are Central Bank of Turkiye Foreign Exhange Buying rates except Euro on December 31, 2001 being the Selling rate.
- Source: https://www.tcmb.gov.tr/wps/wcm/connect/TR/TCMB+TR/Main+Menu/Istatistikler/Doviz+Kurlari/Gosterge+Niteligindeki+Merkez+Bankasi+Kurlarii.
- ENAG Inflation Research Group of Turkiye, independent from the government but using the same inflation basket and weights of the government's statistics office-TUIK Only last 4 years data were available. They started collecting data in 2016.
- Source: https://www.poundsterlinglive.com/bank-of-england-spot/historical-spot-exchange-rates/eur/EUR-to-USD-2003
- Note: Turkiye introduced new Turkish Lira clearing 6 zeros from its currency starting from January 1, 2005. For consistency prior TL rates were also indicated in terms of new TI
- ource: https://data.worldbank.org/indicator/BN.CAB.XOKA.GD.ZS?locations=TR November-23
- Source: https://www.macrotrends.net/countries/TUR/turkey/external-debt-stock#:~:text=Turkey%20external%20debt%20for%202021,a%202.05%25%20decline%20fom%202017 September-23
- Source: https://en.wikipedia.org/wiki/Economy_of_Turkey Source: https://www.worlddata.info/asia/turkey/populationgrowth.php#;~:text=From%201960%20to%202022%20the,209.3%20percent%20in%2062%20years
- Year 2023 data is from: https://www.worldometers.info/world-population/turkey-populati
- Source: https://www.transparency.org/en/cpi/
- ource: https://www.macrotrends.net/countries/TUR/turkey/foreign-direct-investment#:~:text=Data%20are%20in%20current%20U.S.,a%2019.36%25%20decline%20from%202019.

First 6 months 4.8 billion USD. Estimated for the year is 9.6 billion USD

As it is observed from the table above Türkiye's inflation has been in high double digits for the last 4 years. CPI index on the table is declared by Turkish Governmental Statistics Office (TUIK-Turkstat). Next to the CPI column is ENAG's data. ENAG is an independent inflation research group of academicians who calculate the inflation percentage using the same basket and the weights of Turkstat. Because of this ENAG's data is more reliable in the public eye. According to Turkish Euronews, the previous president of Turkstat said that: "Neither TUIK's (Turkstat) data nor Covid-19 numbers reflect the reality. There is no transparency in public administration and accordingly you cannot depend on the data of government offices. Politics intervenes in all areas and solves things by command. Intervening markets and government thinks that they can run the economy by command." ENAG's data is twice as much as the Turkstat's data in the last four years.

Comparing the exchange rate at the time of the clearing of 6 zeros from the currency as of January 1, 2005 and December 31, 2023, Turkish Lira (TL) depreciated against United States Dollar (USD/\$) 12.6 times (29.44/2.32), and against Euro (€) 11.51 times (32.57/2.83).



Turkiye's foreign debt increased 427% between 2023 and 2001. Gross Domestic Product (GDP) has risen from \$3,150 in 2003 to \$13,457 in 2023 (increased 3.27 times). GDP growth has been 571% in the same period. That means GDP grew 33% more than foreign debt. However, this calculation does not consider the population growth in the same period. The US CPI index as at December 31, 2001 was 177.067 and it is 304.702 at December 31 2023. That means US\$ has lost its purchasing power by 72% during the last 22 years. Turkiye's debt as at December 31, 2001 of \$112.9 billion is an equivalent of \$194.2 billion as at December 31, 2023 adjusted for inflation of \$US. Turkiye's per capita income as of December 31, 2001, was \$3,150 which is an equivalent of \$5,418 adjusted for US\$ inflation. These numbers also show us that During 2002-2023 period (last 22 years) Turkiye's GDP per capita increased by % 148.3 (13,457/5,418) whereas its foreign debt increased by % 148.5 (482.6/194.2) during the same period. These comparisons of both nominal and inflation adjusted terms tell us that Turkiye grew by borrowing foreign debt as far as its GDP per capita income is concerned.

Table 1 also tells us another story: Turkiye chronically has been having current account deficit and financing it by positive FDI inflow. In other words, if positive FDI continues Turkiye can sustain having current account deficit. It seems that it can. Having said that what attracts FDI into Turkiye? Table 2 below explains this:

Table no. 2 – Market Data of Turkiye Between the Years 2001 and 2023

Years		1	2	3	4	5	6	7	8	9	10	11				
10015					-		- 0	,			10	- 11				
Years	Dec. 2001	Dec. 2002	Dec. 2003	Dec. 2004	Dec. 2005	Dec. 2006	Dec. 2007	Dec. 2008	Dec. 2009	Dec. 2010	Dec. 2011	Dec. 2012				
TCMB (Central	56.39	50.61	32.23	19.45	15.89	12.43	17.29	17.68	11.43	8.86	13.00	13.00				
Annual		13.89	-15.24	-3.60	0.00	4.48	-17.14	31.03	-1.97	3.36	22.73	-5.82				
Annual Deposit		1.32	1.15	1.24	1.16	1.08	1.42	0.90	1.09	1.05	0.92	1.07				
Source:	https://evds2	.tcmb.gov.tr/i	ndex.php?/e	vds/portlet/l	rcsQFWXtqo%	%3D/tr										
BIST 100	9,614	10,370	18,625	24,972	39,778	39,118	55,538	26,864	52,825	66,005	51,267	78,208				
Annual %		7.86	79.61	34.08	59.29	-1.66	41.98	-51.63	96.64	24.95	-22.33	52.55				
Annual		13.89	-15.24	-3.60	0.00	4.48	-17.14	31.03	-1.97	3.36	22.73	-5.82				
Stock		0.95	1.56	1.29	1.59	0.94	1.21	0.37	1.93	1.21	0.63	1.44				
Source:	BIST 100 (X	U100.IS) Stoc	k Historical	Prices & Da	ta - Yahoo Fi	nance										
Foreign Direct		3.35	1.08	1.70	2.79	10.03	20.18	22.05	19.85	8.59	9.10	16.18				
Cumulative FDI		3.35	4.43	6.13	8.92	18.95	39.13	61.18	81.03	89.62	98.72	114.90				
Source:	https://www.	tcmb.gov.tr/w	ps/wcm/con	nect/TR/TCM	B+TR/Main-	+Menu/Temel-	-Faaliyetler	/Para+Politik	asi/Merkez+B	ankasi+Faiz+C	asi+Faiz+Oranlari/Gec+Likidite+Pe					
Years	11	12	13	14	15	16	17	18	19	20	21	22				
Years	Dec. 2012	Dec. 2013	Dec. 2014	Dec. 2015	Dec. 2016	Dec. 2017	Dec. 2018	Dec. 2019	Dec. 2020	Dec. 2021	Dec. 2022	Dec. 2023				
TCMB (Central	13.00	12.00	16.00	14.15	13.80	16.00	27.00	19.75	20.80	24.00	32.50	63.50				
Annual	-5.82	19.66	8.92	25.86	20.55	7.10	40.05	12.50	24.92	79.65	40.29	57.43				
Annual Deposit	1.07	0.94	1.07	0.91	0.94	1.08	0.91	1.06	0.97	0.69	0.94	1.04				
Source:	https://evds2	.tcmb.gov.tr/i	ndex.php?/e	vds/portlet/l	rcsQFWXtqo%	%3D/tr										
BIST 100	78,208.4	67,801.7	85,721.1	71,727.0	78,138.7	115,333.0	91,270.5	114,425.0	147,670.0	185,770.0	550,920.0	747,020.0				
Annual %	52.55	(13.31)	26.43	(16.33)	8.94	47.60	(20.86)	25.37	29.05	25.80	196.56	35.60				
Annual	(5.82)	19.66	8.92	25.86	20.55	7.10	40.05	12.50	24.92	79.65	40.29	57.43				
Stock	1.44	0.72	1.16	0.66	0.90	1.38	0.57	1.11	1.03	0.70	2.11	0.86				
Source:	BIST 100 (X	U100.IS) Stoc	k Historical	Prices & Da	ta - Yahoo Fi	nance				•		•				
Foreign Direct	16.18	13.74	13.56	13.34	19.26	13.84	11.19	12.45	9.55	7.70	13.33	13.09				
Cumulative FDI	114.90	128.64	142.20	155.54	174.80	188.64	199.83	212.28	221.83	229.53	242.86	255.95				
		tcmb.gov.tr/w														

According to City Realty Turkiye's website: If you want to acquire the citizenship of this country by buying a property in Turkey (author's note: started in 2018), you should know that

since June 2022, the minimum capital required to obtain Turkish citizenship has increased from \$250,000 to \$400,000. In addition, in order to obtain a one-year residence in Turkey, you must invest at least 75 thousand dollars in Turkish properties in order to obtain a temporary residence in this country (Conditions for obtaining Turkish residence by buying property - City Realty Turkey). Of the 22 years of cumulative FDI as of 2023-year end, \$62.5 billion is from real estate (24.4%).

According to Turkish daily newspaper Cumhuriyet (April 7, 2024): During this 22 years period 207 State owned enterprises were privatized (<u>İşte AKP döneminde satılanların listesi - Son Dakika Türkiye, Ekonomi Haberleri | Cumhuriyet</u>) amounting to \$62 billions (https://t24.com.tr/haber/akp-iktidarinda-62-milyar-dolarlik-ozellestirme-yapildi-300-milyon-metrekare-hazine-arazisi-ihaleyle-satildi,949385) which represents 24.2% of the total FDI in the same period.

Excluding the privatizations and realty sales, the big chunk \$131.45 billion (51.3%) of the FDI funding is due to high return on time deposits, government bonds and shares traded in the stock exchanges. Table 2 Annual Deposit Interest Rate/Annual Devaluation rate has been positive for 13 years out of the 22 years period. Any ratio greater than one represents net \$US interest gain over the devaluation in that year. This ratio rose as high as 32% (2002).

A similar observation is on the Stock Market Increase/Devaluation ratio. Of the 22 years period this ratio has been positive for 12 years. This ratio went as high as %111 return (2022) on \$US basis.

The macro-economic indicators of Turkey look gloomy. According to usnews.com: Turkey is one of the 10 highest inflationary countries in the world. Others are Sierra Leone, Iran, Suriname, Haiti, Ghana, Sudan, Argentina, Zimbabwe and Venezuela. The sad thing about Turkiye is that it is the only country from The Organization for Economic Co-operation and Development (OECD) league being in the highest inflationary countries category (https://www.usnews.com/news/best-countries/slideshows/the-10-countries-where-inflation-is-the-highest?slide=12). Turkish Lira-TL has depreciated 20.4 times (29.44/1.44) against \$US and 25.4 times (32.57/1.28) against Euro-€ between 2002 and 2023 (22 years inclusively). According to [IAS 29.3]- Financial Reporting in Hyperinflationary Economies, one of the

According to [IAS 29.3]- Financial Reporting in Hyperinflationary Economies, one of the indicators of having hyperinflation in a country is that: The cumulative inflation rate over three years approaches, or exceeds, 100% (https://www.iasplus.com/en/standards/ias/ias29). According to Turkstat's data on Table 1: Turkiye's 2001-2003 compounded inflation rate is 268%, the same calculation results 887% according to ENAG on the same table. That means TL is a hyperinflationary currency. Another indicator is the development of ratio of F/X denominated and F/X indexed TL deposits' share within the total deposits:

Table no. 3 – F/X Deposits and F/X Indexed Deposits Between the Years 2002 and 2023

Years	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
Years	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
(F/X Deposits+F/X indexed TL deposits)/Total Deposits %	57	50	45	37	39	36	36	32	30	32	33	37	37	42	40	42	47	50	54	66	62	65
Source: https://www.mahfiegilmez.com/2022/06/kur-korumal-mevduat-hesab-dolarizasyonu.html																						



As it is seen above the ratio of F/X denominated deposits` share has significantly increased in last three years. This is also another indicator of hyperinflation in the economy. According to IAS 29.3 "the general population prefers to keep its wealth in non-monetary assets or in a relatively stable foreign currency. Amounts of local currency held are immediately invested to maintain purchasing power." The highest denominated banknote of Turkiye-TL200 would buy \$US138.9 as of December 31, 2001. As of December 31, 2023, it can only buy \$US 6.8. Since there has been a high level of devaluation and inflation in TL, would TL be still the medium of exchange, or would there be other solutions to bring stability to Turkish Currency? That's question and the theme of this paper.

The above tables and explanations have been given to introduce the problem of sustained inflation and devaluation problem in Turkiye. The purpose of the paper is to discuss this permanent economic problem and suggest a solution. Initially, various examples of countries where USD has been adopted as a domestic currency is introduced in the Literature Review. In addition, the question of Turkiye's pegging its currency to a currency board is discussed in Discussion Part 1. Furthermore, replacing TL with USD along with the savings on the part of the government and a borrowing from IMF is discussed as a solution. The paper concludes that the second part of the discussion will be the best solution as far as the Turkiye's dire economic situation is concerned. Considering the negative indicators of Turkiye on all macroeconomic indicators and the political pressures on Central Bank of Turkiye-CBOT, the currency board may not be able to sustain the TL's strength against the hard currencies like GBP, USD, Euro over the years.

2. LITERATURE REVIEW OF THE COUNTRIES THAT CHOSE USD AS THEIR DOMESTIC CURRENCY

Zimbabwe (former Rhodesia) is one of those countries that has historically been a hyperinflationary country. In the last decade, the economy of Zimbabwe underwent unprecedented stress and change. Starting in year 2000, land reform began with farm invasions. This process eventually evolved into a government-guided fast-track reform. During this process, the international community-imposed sanctions, and these factors, together with a severe drought, led to a reduction in availability of the main food staple. Inflationary pressures built and were exacerbated by foreign exchange (F/X) shortages. The economy slowed due to debt overhang and dwindling investment caused in part by increased uncertainty. Several factors contributed to deterioration of the value of the Zimbabwean Dollar and by mid-2007, hyperinflation became rampant. The economic crisis began to abate in 2008 and political agreements signed in 2008 and implemented in 2009 led to further stabilization (Larochellea, Alwanga and Taruvingab, 2014).

Confidence in the Zimbabwean dollar decreased, and people increasingly held transactions in foreign currencies such as the US dollar, South African Rand and Euro. Further, inflation in the previous year, money supply and interest rate in the current year were found to positively affect inflation in a significant way. In view of both long-run and short-run results, there is evidence that public debt, money supply and interest rate have a statistically significant and positive impact on inflation process in Zimbabwe (Saungweme and Odhiambo 2021).

Recently Zimbabwe pegged its inflationary Zimbabwe Dollar into new currency ZiG. According to Al Jazeera news on April the 5th 2024: Zimbabwe's central bank has launched a new "structured currency" backed by gold, as it seeks to tackle sky-high inflation and stabilize the country's long-floundering economy. The new currency – called Zim Gold (ZiG) – will be backed by foreign currencies, gold and precious minerals, John Mushayavanhu, the governor of Zimbabwe's Reserve Bank, told reporters in the capital Harare on Friday. The new currency – called Zim Gold (ZiG) – will be backed by foreign currencies, gold and precious minerals, John Mushayavanhu, the governor of Zimbabwe's Reserve Bank, told reporters in the capital Harare on Friday (https://www.aljazeera.com/news/2024/4/5/zimbabwe-introduces-new-gold-backed-currency-to-tackle-inflation).

Panama experience: Panama historically has been under the US influence. The Panamanian Balboa (PAB) was introduced in 1904 marking Panama's independence from Colombia and the start of construction of the Panama Canal by US. PAB has been pegged against \$US at 1:1 parity since then. This pegging of local currency to \$US in Panama was not a consequence of high inflation or devaluations of PAB, it was basically because of US economic and political influence in the constructing the Panama Canal. Canal contributes highly to Panama's economy, besides its attractive tourism industry. PAB replaced the Colombian peso and brought a new era for the country. The initial balboas were silver coins in various denominations, including 2 1/2, five, 10, 25, and 50 centésimos. These early coins closely resembled their U.S. counterparts in terms of composition and size...The U.S. intervened in Panama in 1989, aiming to restore stability. Since then, the country has experienced economic growth, though wealth distribution remains unequal...The 1:1 pegging of the Panamanian Balboa to the U.S. dollar plays a crucial role in facilitating international trade. This fixed exchange rate provides stability and predictability for businesses and foreign investors operating in Panama. It simplifies financial transactions and eliminates the risk associated with fluctuating exchange rates. As a result, Panama's economy benefits from a conducive environment for trade and investment, contributing to its economic growth and global presence...The coexistence of the U.S. dollar alongside the Panamanian Balboa is a unique aspect of Panama's monetary system. While the Panamanian Balboa is the official currency, the U.S. dollar is widely accepted and used in everyday transactions. This duality offers convenience for businesses and tourists with U.S. dollars, as they can conduct transactions without the need for currency exchange. The U.S. dollar's influence extends beyond everyday use, as it has shaped Panama's monetary and economic policies for over a century (Panamanian Balboa: History, Pegging, and "Seven Days' Notes" - SuperMoney).

During 1960-2022 period (63 years inclusively) the lowest inflation rate noted in **El Salvador** was -2.7% (1961, a deflation) and the highest was 31.9% (1986) (<u>Inflation, consumer prices (annual %) - El Salvador | Data (worldbank.org)</u>. El Salvador has never been a hyperinflationary country. On Jan. 1, 2001, the Monetary Integration Act, passed by the Legislative Assembly of El Salvador the year before (author's note: starting from January 1, 2000), replaced the SVC with the U.S. dollar at a rate of 8.75 to 1 (1\$=8.75 Colons-SVC-\$\mathbb{C}\$) (SVC (El Salvador Colon): What It is, History (investopedia.com). Its GDP growth from 1965 to 2022 steadfastly (58 years inclusively) grew from \$0.88 billion to \$32.5 billion. GDP per capita grew from \$276 to \$5,127 during the same period (El Salvador GDP 1965-2024 | MacroTrends). El Salvador, replaced its currency with \$US while its economy was growing and inflation was not at hyper levels.



The transition from the El Salvador Colón to the U.S. Dollar had profound effects on the nation's trade and tourism industries. With the adoption of the U.S. Dollar, El Salvador seamlessly integrated into the global economy. International transactions became more straightforward, eliminating the need for constant currency conversion. The newfound currency stability facilitated trade relationships and attracted foreign investments. Foreign investors were more inclined to engage in El Salvador's economy post-2001. The fixed exchange rate and the U.S. Dollar's global recognition provided a secure and familiar environment for international businesses. This resulted in increased foreign direct investment, fostering economic growth and stability. The simplified currency system became an attractive feature for tourists. With the U.S. Dollar widely accepted, travelers found it easier to plan and manage their expenses. This accessibility contributed to a surge in tourism, as El Salvador became a more appealing destination for both business and leisure travelers (El Salvador's Currency Evolution: From Colón to Dollar, Insights & Impact - SuperMoney).

The end of the 20th century caught Ecuador in one of the more serious economic crisescompounded by a governance crisis-in its Republican history. The country was on the verge of hyperinflation in late 1999 with the price level increasing at a rate of nearly 30 percent per month. The national currency, the sucre, was in free fall. The government had intervened in the banking system, and a large part of the deposits of the public was frozen. Internationally, in late 1999 the country was in partial arrears with private creditors and bondholders, and, for various reasons, the International Monetary Fund (IMF) had withheld for nearly a year a crucial loan to support the balance of payments. This, in turn, forced the World Bank and the Inter-American Development Bank (IDB) to postpone their own policy-based lending to Ecuador in 1999, stalemate with the loan by the IMF. At a time when hyperinflation had abated in Latin America, the Ecuadoran case of extreme monetary instability was clearly a regional anomaly for the late 1990s. Most of the ingredients of high inflation and acute monetary instability were present: (a) a flight from national money and de-facto dollarization as nationals and foreigners in Ecuador lost all confidence in the capacity of the sucre to serve its store-of-value function, (b) large fiscal deficits, (c) a sharp contraction in real economic activity, and (d) a severe banking crisis. The increasingly cornered government, led by President Jamil Mahuad, a highly educated and intellectually sophisticated social democrat, could not gather congressional support for passing crucial tax legislation and other measures to stabilize the economy. This situation, combined with the near paralysis of the international financial institutions based in Washington, helped bring about an economic meltdown manifested in very high inflation, a banking-crisis, economic depression, and social disarray during most of 1999 (Beckerman and Solimano, 2002).

Author's note: Quasi-money: Near money items, cash and cash equivalents, highly liquid assets convertible to cash. The above table 4 was taken from Beckerman's article published in 2001. It shows the increasing proportion of \$US dominated items in their own totals. **Ecuador's** currency Sucre was replaced by \$US starting from January 1, 2000. The reasons are very similar to any country that did the same due to economic turmoil.

Table no. 4 – Indicators of Semi-Dollarization in Ecuador Between 1989 and 1999

Ecuador: Indicators of semi-dollarization											
Year	Year -end per	centage in 1	U.S. dollars of:								
	Quasi-money	Deposits	Loan portfolio								
1989	9.70	14.70	1.90								
1990	7.40	13.30	1.50								
1991	7.50	14.50	3.00								
1992	10.80	20.00	6.80								
1993	12.60	16.90	13.40								
1994	15.70	15.60	20.30								
1995	24.30	19.20	28.30								
1996	28.00	22.30	32.60								
1997	36.90	23.60	45.10								
1998	43.90	36.90	60.40								
1999	47.40	53.70	66.50								
	Source: Centre	al Bank of I	Ecuador								

First, dollar currency was increasingly used within Ecuador for transactions. Second, Ecuadorians made increasing use of off-shore deposits, which were not included in official money-supply figures (Beckerman, 2001). At the end of the twentieth century, Ecuador experienced one of the most serious crises in the history of the Republic with inflation rates being recorded at 30% per month. The government intervened in the banks and many public deposits were frozen. Internationally, Ecuador's standing was not good; it was in arrears with its private creditors and bondholders, while the International Monetary Fund, the World Bank and the Inter-American Development Bank withheld important loans that might have supported the Ecuadorian balance of payments (Del Cristo and Gomez-Puig, 2013).

Table no. 5 – Macroeconomic Indicators of Ecuador Between 2018 and 2022

Years	2018	2019	2020	2021	2022
Population (million)	17.0	17.3	17.5	17.8	18.0
GDP \$US billion	107.5	107.6	95.9	107.4	116.6
GDP per capita \$US	6,314	6,231	5,475	6,050	6,475
Economic growth %	1.0	0.2	-9.2	9.8	6.2
CPI Inflation %	-0.2	0.3	-0.3	0.1	3.5
Source: https://www.fe	ocus-eco	nomics.	com/cou	ntries/ec	cuador/

Table 5 data shows the progress of Ecuador's economic performance between 2018-2022. Excluding the Covid 19 effect during 2019-2020 Ecuador's economic indicators show a positive progress over the 5 years period.

As a British overseas territory, the **British Virgin Islands** (**BVI**) once used the British Pound. But even before they adopted the US Dollar as the official currency in 1959, people in the tourism and trade industries were already using the dollar, as it's the most stable and universally accepted currency for global business transactions. It's also convenient given the close economic ties between the BVI and USVI (US Virgin Islands). Today, the US dollar



continues to be the official currency and is recognized as such by the British government. The British Virgin Islands government does not intend to replace the US dollar with a different currency, including a digital currency (What is the Official British Virgin Islands Currency? (aerialbvi.com). Its GDP per capita growth has been stable since 1970 with the exception of Covid 19 years (2019-2020). It rose from \$US 7,778 (1970-adjusted for inflation at 2017 price level) to \$37,369 (based on 2017 prices) in 2019 (GDP per capita, 1970 to 2019 (ourworldindata.org). In 2023, despite the setbacks experienced from high and prolonged interest and inflation rates, the economy of the Virgin Islands continues to show small but growing signs of stability. Tourist arrivals continue to rise, financial services is expected to remain stable, local investment in property and land is anticipated to keep constant, economic activity has grown in nominal terms, interest for foreign investment remains high, and employment is expected to grow (2022-2024 Macro-economic Review and Outlook (gov.vg). Being a financial center for foreign investors and a tourist attraction, BVI's adapting \$US as its national currency is a consequence of positive economic indicators.

Like BVI, **Turks and Caicos Islands** being a British overseas territory uses \$US as its domestic currency. Like many other Caribbean islands their proximity to US led their preferences to use \$US as their domestic currency. Many US citizens/residents choose these islands for touristic visits. Its latest GDP figure is \$1.14 billion and per capita income \$24,918 for 2022 (Turks and Caicos Islands GDP 2001-2024 | MacroTrends).

Javier Milei's vision for **Argentina** is centered on abolishing Argentina's Central Bank, which stems from his belief that this entity has a history of "robbing the people" by ineffectively managing monetary policy and printing more money, devaluing the peso. He emphasizes a gradual approach to dollarization, driven by individual and business choices, with an automatic shift once two-thirds of the monetary base adopts the U.S. dollar. This flexible approach allows the transition to align with the preferences of the Argentine population. Milei suggests funding this transition using the government's financial reserves and the sale of Central Bank bonds. In terms of political processes, Milei's plan is unique in that he proposes allowing the people to decide through a plebiscite if Congress previously rejects the plan. He also emphasizes a focus on free trade, peace, freedom, and aligning with Western countries, particularly the US and Israel, while showing reluctance toward relations with communist nations like China and Venezuela (Demalde, 2024). Dollarization has pros and cons. Pros:

- 1. It will bring currency stability to the economy and lower inflation. That will prevent the country's chronic hyperinflation problem. Interest rates, accordingly, will be lower.
- 2. Borrowing for commercial and personal needs would be more affordable.
- 3. Since the currency volatility will be lower, foreign investors will better see their prospects in the markets. FDI will increase in the country.
- 4. Additionally, businesses engaged in international trade would benefit from reduced transaction costs, Import and export will be easier as traders will not worry about

devaluations of the local currency-Peso. It will enhance the country's integration to the global world and volume of trade.

Cons:

- 1. Argentinian government or Central Bank (CB) will lose control over the supply of currency. Loss of seniorage. It has two folds. In one aspect it may seem to be a negative on the part of the government or CB not controlling its money supply but on the other hand it will have a compelling effect on the part of the government to balance its budget.
- 2. Economic downturns in US economy will negatively affect Argentina's economy. I.e. If \$US interest rates increase then the interest rates in Argentina will increase too. This may in turn limit economic growth.

Table no. 6 – Macroeconomic Indicators of Argentina Between 2016 and 2023

Argentina Economic Indicators												
Years	2016	2017	2018	2019	2020	2021	2022	2023				
GDP \$US billion	557.53	643.63	542.82	447.75	385.74	487.90	631.13	622.30				
GDP per capita \$US	13,400	13,600	13,100	12,700	11,300	12,400	12,900	12,800				
CPI Inflation Index	100.0	124.8	184.3	283.4	385.9	582.5	1,130.0	3,530.0				
CPI Inflation %		24.79	47.66	53.83	36.14	50.94	94.00	212.39				
Source: https://tradin	geconomi	cs.com/ar	gentina/ir	ndicators								

Table 6 indicators present that Argentina is a hyperinflationary economy. It is not only the last decade that Argentina has high inflation rates, but it has also always been a hyperinflationary country in the past. Argentina with severe stagflation from 1975 to 1990, including a bout of hyperinflation in 1989 and 1990 (Economy of Argentina - Wikipedia). These indicators justify Argentina's newly elected president Mr. Javier Milei's dollarization decision.

Apart from Panama, El Salvador and Caribbean Island economies, Zimbabwe, Ecuador, and Argentina examples indicate that these countries are worn out with the abrasive effects of inflation and devaluation and foreign debt spirals.

Table no. 7 – Foreign Debt of Zimbabwe, Ecuador, Turkiye and Argentina Between the Years 2014 and 2023 in Million \$US

	Foreign Debt in \$US million												
Years →	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023			
Zimbabwe	8,358	9,648	11,467	12,513	12,623	12,247	12,743	13,739	14,0001	14,0002			
Ecuador	24,971	28,393	35,382	41,157	44,960	51,896	56,332	58,259	57,500	57,821			
Turkiye	406,100	400,000	410,000	457,300	447,900	444,500	441,100	435,400	459,000	482,600			
Argentina	159,000	167,000	181,000	235,000	278,000	278,000	271,000	267,000	276,000	286,000			

Source: https://www.macrotrends.net/global-metrics/countries/ZWE/zimbabwe/external-debt-stock

 $^1 Source: https://www.afronomicslaw.org/category/african-sovereign-debt-justice-network-afsdjn/sixty-eighth-sovereign-debt-news-update$

²Since 2001, Zimbabwe has been in default in paying its foreign debt to IMF and other banks. No reliable data is available for 2023.



According to the latest Treasury statistics, arrears remain a major challenge to the country's economy, constituting more than 77% of total external debt. Zimbabwe's current debt stock is officially reported to be around USD17.5 billion, with USD14 billion accounted as external debt as of September 2022. The accumulation of external debt payment arrears and penalties is estimated at USD6.3 billion, with arrears to multilateral development banks, including the African Development Bank, the World Bank, and the European Investment Bank. Due to its arrears, the Zimbabwean government's capacity to borrow has been negatively affected as the country has not received loans from lenders such as the International Monetary Fund World Bank for than decades (IMF) and more (https://www.afronomicslaw.org/category/african-sovereign-debt-justice-network-afsdjn/sixtyeighth-sovereign-debt-news-update). Zimbabwe has been in debt distress since 2001 which resulted in multilateral institutions such as the IMF and World Bank suspending further disbursements and new loans. Since then, arrears on both principal and interest payments on external debt have been accumulating and interest compounding ((ToRs-Annual-Debt-Management-Report-2021.pdf (zimcodd.org).

When the IMF announced last month that it would lend **Ecuador** \$6.5bn to get its battered economy back on track, the largest piece of a complex debt-restructuring jigsaw fell into place. The loan also capped six month-long negotiations with international creditors on several fronts — which all yielded successful outcomes (Long, 2020). Ecuador is the eighth largest economy in Latin America. However, the country is highly dependent on oil production and vulnerable to global oil prices. According to the IMF, GDP grew by an estimated 3% in 2022, mainly supported by private consumption amid a stable job market and gross fixed investment. In 2023, the economy is expected to fully recover from the GDP shortfall triggered by the COVID-19 pandemic. As such, GDP is expected to grow by 2.9% in 2023 and remain stable at 2.8% in 2024 (Economic Outline of Ecuador - International Trade Portal (lloydsbanktrade.com).

Ecuador is gaining stability again, however Zimbabwe being a hyperinflation prone country for many years may not be able to reap of adapting its Sucre to \$US in the short run. Argentina and Turkiye are two similar countries, both have been hyperinflationary in the past and at the present. On December 30, 2013 1US\$=6.52 Argentina Peso, ten years after at December 28, 2023 1US=808.45 Argentina Peso. A 123 times devaluation in 10 years with a very steep curve in last couple of years.

3. DEFINING THE RESEARCH PROBLEM-PART 1: CAN TURKIYE PEG ITS CURRENCY TO A CURRENCY BOARD?

A Currency Board Arrangement-CBA is a monetary arrangement based on a legislative commitment to exchange domestic currency for a specified foreign currency at a fixed exchange rate. It is a commitment on the part of the currency board. This structure implies that domestic currency be issued only against F/X and that it remain fully backed by foreign assets. Thus, it eliminates traditional central bank functions like monetary regulation and the lender of last resort (LOLR); such a CBA is defined in this paper as a "pure CBA" (Balino and Enoch, 1997). Of the discussions that make the currency board newsworthy are advantages of decreasing interest and inflation, ease of governance, financial discipline, convertibility, balance of payments, ease of

transition, decreasing the risk of crises, whereas loss of seniorage, loss of effectiveness of monetary policy, release of wage variability, loss of being reference of last resort, creating colonies, fixed exchange rate policy and economic magnitude are the disadvantages. Steve Hanke who is identified with currency board system, its robust defender, completed many studies in this field, suggested currency boards to Indonesia, Malasia, Korea, Turkiye, Bulgaria, Estonia, Lithuania and many other countries, repeated his suggestion in 2005 and 2006 for Turkiye (Colak and Barisik, 2009). Hanke et al., suggested currency board to Russia: The current situation is unsustainable, however, and extreme inflation contains the source of its own destruction. The ruble is decreasing in importance in the Russian economy as relatively stable foreign currencies displace it. The extensive displacement of the ruble by foreign currency in the Russian economy will ultimately cause real (inflation-adjusted) revenue from creating new rubles to diminish almost to zero. When that happens, the parliament will no longer be able to continue most subsidies that now exist. Unprofitable state enterprises will have to fire workers and consumers will have to pay higher real prices for formerly subsidized goods. At that point, a political upheaval will probably result. It is unclear whether the Russian public will blame the parliament, the executive branch, or both for extreme inflation, but whatever the case, the result will be a new configuration of political forces (Hanke, Jonung and Schuler, 1993). In his article in 2021 he suggested the currency board for Turkiye as well: To save the Turkish lira and perhaps save his own skin, Erdogan should announce that Turkey will install a currency board. All Erdogan would have to do is follow the instructions that are contained in my book Gelişmekte Olan Ülkeler İçin Para Kurullari (English translation: Currency Boards for Developing Countries), which was published in Ankara in 2019. With a Turkish currency board, the lira would be tied to a stable anchor (the dollar, euro, or gold) at a fixed exchange rate. The lira would be fully backed by anchor currency reserves. With a currency board, the lira would become an international currency that holds its purchasing power over time (Hanke, 2021). Here, the question is: Does Turkiye have F/X reserves to peg its currency-TL to a stable foreign currency or a basket of foreign currencies? The answer is "no." Turkiye, unfortunately has no F/X reserves. As of January 12, 2024 week data, Central Bank of Turkiye-CBOT's net F/X reserves excluding swap deals was minus \$US 39.3 (https://www.bloomberght.com/tcmb-ninnet-rezervlerinde-gerileme-2345886). The fact that Turkiye do not have any in red balance in F/X reserves., CBOT made some swap deals with other countries' central banks whose currencies are more stable than TL to show its balance sheet in positive balance in F/X assets. CBOT` net loss for 2023 in \$US terms from year-end closing rate is \$US 27.7 billion (Muratoglu, 2024). As of December 31, 2023, Turkiye's current account deficit is minus \$US 45.2 (Keyder, 2024). As of December 31, 2023, Turkiye's public total foreign currency denominated debt is \$US 146.5 billion. As of December 31, 2023, Turkiye's public total debt including current account deficit and CBOT's open position and its loss is \$US 259.2 billion. According to March 2024 date Turkiye's average borrowing rate from foreign bankers is 8.66% \$US (https://www.statista.com/statistics/886815/average-commercial-loan-interest-rate-inturkey/). Turkiye is paying high interest rate due to being a low on creditworthiness. As of the beginning of 2024 Standard & Poor's credit rating for Turkey stands at B with positive outlook. Moody's credit rating for Turkey was last set at B3 with positive outlook. Fitch's credit rating for Turkey was last reported at B+ with positive outlook. DBRS' credit rating for Turkey was last reported at BB (high) with negative outlook. In general, a credit rating is used by sovereign wealth funds, pension funds and other investors to gauge the credit worthiness of Turkey thus having a big impact on the country's borrowing costs



(https://tradingeconomics.com/turkey/rating). B rating means there is little safety margin but high risk of default for a country in repaying its debt. Besides, Turkiye has local currency budget deficit. It is 5.9% of GDP (author's note: it is an equivalent of \$US 68.1 billion as at December 31, 2023) (https://www.bloomberght.com/2023-butce-acigi-belli-oldu-2345616). Domestic debt is considered from government to people which in consolidated terms makes a zero total. According to recent data Turkiye's treasury is paying 45.59% annual interest rate for its 2 years maturity bonds (https://www.bloomberght.com/faiz-bono). Having said that in case of Turkiye converting its currency to \$US, local currency budget deficit will no longer be a total zero phenomenon. It will be part of the public debt as CBOT will no longer have monetary authority. On the other hand, Turkiye's tax revenues as of the year end 2023 is I.e. The Central Bank of the Republic of Turkey and The Bank of Korea today entered a Turkish Lira-Korean Won bilateral swap agreement, effective immediately. Governor Şahap Kavcıoğlu and Governor Juyeol Lee signed the agreement. The swap agreement allows for the exchange of local currencies between the two central banks of up to TRY (TL) 17.5 billion or KRW 2.3 trillion. The effective period is 3 years from today and could be extended by mutual agreement between the two sides. This agreement is designed to promote bilateral trade through a swap-financed trade settlement facility and financial cooperation for the economic development of the two countries. The two sides expect that this will further strengthen collaboration between the two institutions

(https://www.tcmb.gov.tr/wps/wcm/connect/EN/TCMB+EN/Main+Menu/Announcements/Press+Releases/2021/ANO2021-34). Even though Turkiye has negative F/X reserves it can still convert its currency to a more stable foreign currency like \$US which is widely accepted in World's trade. The numbers given above are the liabilities part of the balance sheet of Turkiye. On the asset side Turkiye has tax income. In \$US terms from average \$US rate (1\$US=23.74) it is an equivalent of \$US 189.6 billion, of which \$US 105.3 billion is made of from VAT (Value Added Tax) and SCT (Special Consumption Tax) making up the 55.5% of the total tax revenue, altogether the total of indirect taxes is 65% of the total tax revenue (Yaman, 2024).

Besides the deficits Turkey completed a national risk assessment in 2018. Due to its geographic location, the country faces the greatest money laundering risks from drug trafficking, migrant smuggling, human trafficking, and fuel smuggling. The country also faces significant terrorist financing risks from both national and international threats (https://www.fatf-gafi.org/en/countries/detail/Turkey.html#:~:text=Member%20since%201991&text=The%20country%20reported%20back%20to,3%20of%20the%2040%20Recommendations.). Being on the "gray list" of FATF (author's note: FATF-The Financial Action Task Force, established in 1989 by the G7. It is an organization to prevent money laundering between the countries) means that the country is being an intermediary of money laundering which reduces the country's trustworthiness. Turkey has successfully concluded technical studies aimed at removal from the Financial Action Task Force's (FATF) grey list, treasury, and finance minister Mehmet Şimşek has said (Kumar, 2024).

4. DEFINING THE RESEARCH PROBLEM-PART 2: AUSTERITY MODEL BASED ON USD

Collecting the above figures on a table, and if the government saves from its expenditures \$US 20 billion every year with only 1 and 2% growth in GDP and tax revenues. The following table would be a solution to this dire situation:

Austerity Measures Scenario 0 1 7 9 10 \$US billion/Years → 2 3 5 6 8 2 GDP growth % 0 2 2 2 2 2 2 1 1 2 **GDP** 1,154.6 1,166.1 1,177.8 1,201.4 1,225.4 1,249.9 1,274.9 1,300.4 1,326.4 1,352.9 1,380.0 16.75 Total debt/GDP % 28.30 29.06 26.94 24.62 22.38 20.35 18.15 16.75 16.75 16.40 193.4 222.2 197.3 205.2 209.4 Tax revenue 189.6 191.5 201.2 213.5 217.8 226.6 CBOT`s short F/X position 39.3 34.3 29.3 24.3 19.3 14.3 9.3 4.3 0.0 0.0 0.0 27.7 22.7 17.7 12.7 7.7 2.7 0.0 0.0 0.0 0.0 0.0 CBOT's loss 35.2 45.2 40.2 30.2 25.2 20.2 15.2 10.2 5.2 0.2 0.0 Current account deficit Public F/X debt 146.5 146.5 146.5 146.5 146.5 146.5 146.5 152.9 175.7 194.5 199.2 Budget deficit in \$US 68.1 63.1 58.1 53.1 48.1 43.1 38.1 33.1 28.1 23.1 18.1 0.0 20.0 10.0 0.0 0.0 IMF loan 20.0 20.0 20.0 20.0 15.0 5.0 7.3 Interest on loans 0.0 12.1 10.5 9.0 7.5 7.5 7.3 8.1 8.8 9.0

274.3

-73.1

20.0

254.3

-49.0

20.0

231.4

-22.0

20.0

217.8

-4.3

20.0

222.1

-4.3

20.0

226.6

-4.4

20.0

226.3

0.3

20.0

Total debt

Net monetary position
Budget spending savings

326.8

-137.2

338.9

-147.4

20.0

317.3

-123.9

20.0

295.8

-98.5

20.0

Table no. 8 – Austerity Measures Scenario of Turkiye

There is no easy solution. On the table above, the Turkish Government (government) is expected to save \$US 20 billion every single year for 10 years. Year 0 will be the prep year for dollarization. Here the assumption is that: The government will not intervene in the markets. I.e. the \$US rate against TL will float without CBOT intervention. The government will declare that it will not any longer issue TL denominated bonds and extinguish the existing TL bonds at their present value in \$US. The government will make a standby agreement with the International Monetary Fund (IMF) for \$US 20 billion at (assumed) 4.5% annual interest rate starting from the beginning of year 1. This will ease the interest rate pressure on its existing Public F/X debt. For the first year 25% of the Public F/X debt will be revolved at 4.5% and 75% will be revolved at 8.66% per year. In the following years 2,3 and 4 this balance will gradually 100% of the public F/X debt being refinanced at 4.5%. This gradual transition will ease the interest expense on the debt in successive years after the first year. At the beginning of the year 0, the government should declare that from the beginning of year 1 every transaction will be handled in \$US. This will increase the demand for \$US and probably a high devaluation will occur. Starting from year 1, the government will save \$US 20 billion in its spending and the GDP growth will be 1% for the first 2 years. 20 billion saving will be used in decreasing the CBOT's short position \$US 5 billion every year till the end of year 8. Likewise, another \$US 5 billion a year will be used to reduce the CBOT's loss till the end of year 6. The 3rd 5 billion US will used in decreasing the current account deficit. Here, there is the tough question: How is Turkiye going to decrease current account deficit? Over the 22 years period from 2001 till 2022 (inclusively) Turkiye's



increased \$US 10.45 \$US 46.48 billions tourism income from to (https://www.statista.com/statistics/920806/total-tourism-income-in-turkey/). This figure went up to \$US 54.3 billion in 2023 (https://www.dailysabah.com/business/tourism/turkiye-crowns-2023with-record-492m-tourists-543b-in-revenue). It is probable that Turkiye can decrease its current account deficit problem by increasing its tourism revenue by increasing the number of tourists visiting the country. Equally important, Turkiye should export goods and services in which there is more value added produced from within the country. I.e. comparing export values in \$US per kg 2023 vs 2022: Jewelry exports rose by 10.09%, aviation-defense rose by 13.68%, ship and yacht services by 13.75% (https://www.ekonomim.com/ekonomi/ihracatin-degeri-maliyetindenartti-haberi-726143). The findings of this study allow us to drive a few important policy proposals for Turkish manufacturing industry: Although this study finds no association between labor productivity and import substitution, it confirms that import substitution enhances industrial competitiveness. Therefore, conditional and transitory support of domestic production of some medium and high technology intensive products being imported may affect both manufacturing competitiveness and foreign trade balance of Turkey positively. In other words, while promoting manufacturing exports on the one hand, production of medium and high technology intensive capital goods domestically should be promoted. This will contribute the growth of Turkish economy in a sustainable and healthy way (Kiliçaslan and Temurov, 2016).

Public F/X deficit will be renewable and financed at more reasonable rates and will grow further starting from year 7 and onwards as the economy becomes more stabilized and GDP keeps growing.

Starting from year 1 the budget deficit will be pronounced in \$US since TL will not be a medium of exchange. It is to be reduced by \$US 5 billion starting from the 1st year until it is substantially reduced in year 10. Current account deficit and budget deficit are the "twin deficits" in economics literature. If one is negative the other one is also negative as a requirement of being twins, but that is unbearable in an economy. It means the country should attract more investments into the country either directly or in the form of "hot money-attracted by high interest-bearing investments." Paying high interest to hot money means transferring country's savings to abroad which is also detrimental to the economy. The solution is to get rid of at least one of the deficits as is shown in the model above. In this model the economic growth will be at minimum as the government spending will be at minimum. The growth will only be fueled by the private sector. The interest rates will still be high in the first 3 years. It will also be hard to invest in the private sector.

IMF loan will be paid back in the second half of the 10-year period. Public F/X debt and budget deficit will become manageable.

The model is named as "austerity model" since it will bring hardship to the society. Today (May 2024) the lowest retiree salary is TL10K which is approximately \$US 300. It may even go down below when the austerity model is practiced. It is in the hands of the government to distribute the pressure equally over the different age and salary groups. The model above can be iterated. I.e. the model can be extended into 15 years and the savings on the government part may be reduced to 15 or 10 \$US billion per year. It won't change the main idea here. It is going to be tough on society.

5. CONCLUSION

Economics is a science of choices. Turkey cannot go in this down spiral. As of 2021 Turkiye's GINI coefficient is 44.4 (https://data.worldbank.org/indicator/SI.POV.GINI?end=2023&start=2023&view=bar). It is a factor measured between 0 and 100%. Gini fluctuated between 2002 and 2021. In 2002 it was also 44%, that means nothing has changed as far as the income distribution inequality is concerned for Turkiye during the 20 years period. The Gini coefficient, one of the measures of income inequality that varies between 0 indicating complete equality and 1 indicating complete inequality, was estimated at 0.433 with an increase of 0.018 points compared with 2022, TurkStat said (https://www.turkishminute.com/2024/01/29/turkey-income-distribution-gap-widened-2023/). Dollarization will help Turkiye's economy to perform better in the following ways:

- 1. The government(s) will not be able to print money to expand the economy in election years and cause inflation. Seniorage will no longer exist. The only tool that the government may use for expansion will be the \$US denominated treasury bonds.
- 2. Turkiye's position in the corruption perception index (Table 1) is at very low levels. It dropped from 54th position in 2001 down to 115th position in 2023. Dollarization together with the transparency in the government may again lead Turkiye go up high in the ranking.
- 3. Turkiye's B ratings in creditworthiness may go up to A level and Turkiye pays lower interest rates at F/X borrowing from foreign banks abroad.
- 4. Foreign investors will be more confident when they invest in stocks and bonds in Turkiye due to currency exchange rates being fluctuated.
- 5. Foreign trade will be easier both for importers and exporters as they would not worry about high exchange rate fluctuations. The country will be more integrated into global trade. They will start following Chinese Yuan, European Union Euro parities against \$US.
- 6. Interest rates will be determined by the Fed not CBOT. That will bring more stability in the economy.
- 7. No more devaluations will occur. Comparisons between various earning groups will be easier. I.e. Retirees can compare their benefits vis a vis the working class or government employees.
- 8. During the first years some products may be expensive as compared to the past. I.e. vegetable prices, dairy products. People may complain about it. However, as the system settles down the income distribution may get better and GINI % goes down. This is in the hands of the government.

There is no easy way of reversing going down spiral. It takes time and effort, but it is the only way to save the country from continuous downturns.



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