The Debt Growth Nexus in Developing Countries: Evidence from Analysis

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Abstract

This research was mainly conducted to include an examination of the evolution of external debt structure and burden in a number of developing countries in order to assess the impact of external debt on economic growth. The evolution of external debt structure and its indicators over the period (2000-2020) has been studied; also, the economic growth performance was analyzed simultaneously during the same period, which showed several developing countries have used external borrowing to accelerate growth over the last years, but the reality shows that the intense accumulation of these debts in some developing countries has become a real impediment to their economic growth and then development. Other countries, on the other hand, have been able to improve the volume of benefits from external borrowing, reduce its costs, and even reach high rates of growth and development.

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1. Introduction

External debt presents significant challenges for developing countries, especially in the context of floating exchange rate systems, open capital accounts, and rapid integration into global financial markets. External borrowing is not a problem for a country until it generates greater returns than the cost of borrowing, but it becomes a problem when not used effectively. External debt would increase capacity and output growth, making debt more productive; on the contrary, this debt can lead to fiscal imbalances and heavy foreign borrowing, making the country more vulnerable to various shocks and crises. The **research problem** revolves around a serious burden of external debt on the developing countries economy, as it increased dramatically in previous years, which is considered a heavy burden for economic growth, necessitating the need to discuss the relationship between external debt accumulation and its impact on economic growth. The research is based on the **hypothesis** that “The external public debt may have a negative effect on economic growth in developing countries". The **main objective** is to test the research hypothesis to investigate the relationship between external debt and economic growth in developing countries. The **research Methodology** will depend on the inductive approach and data analysis. In this regard, it would be relying on economic analysis to test the basic hypothesis of the study depending on foreign debt databases published by the World Bank.

For further analysis of external debt and its relation to growth, debt ratios that indicate potential debt-related risks will be involved. Debt ratios are considered in conjunction with key economic and financial variables. For the purposes of this debt profile three debt ratios, External debt-to-Gross Domestic Product, External debt-to-exports, and External debt service-to-exports were considered. The countries' selection is based on the convergence of their external debt indicators in 2019.

2. Literature review

In the face of inadequate international public finance flows as well as lack of accessibility to concessional resources, developing economies have increasingly raised development finance on commercial terms in international financial markets. While increased access to global financial markets can assist capital-scarce countries raise much-needed funds more quickly, it also reveals them to higher risk profiles of debt contracts, such as shorter maturities and more volatile financing costs, as well as sudden downturns of private capital inflows. External debt burdens deemed sustainable by international creditors can quickly become unsustainable when combined with other exogenous shocks such as natural disasters, pandemics, or political instability (UNCTAD, 2020).

The empirical literature yielded a variety of conclusions about the relationship between external debt and economic growth. According to some studies, external debt is beneficial to economic growth.

Others contended that external debt seemed to be harmful to economic growth. The other group of studies proposed a non-linear relationship between the two variables and thus concluded that external debt has both a positive and negative effect on economic growth. External public debt appears to have a U-shaped relationship with a country's economic growth, measured by external debt to GDP (Muhammad, Mustapha, 2016).

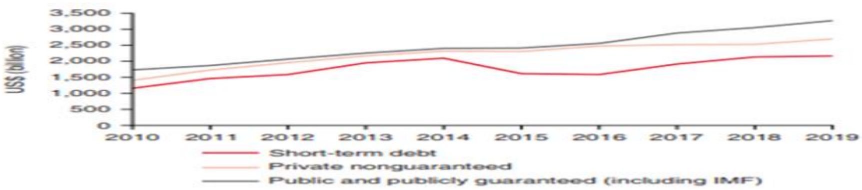
Poirson (2004) used data from 61 developing countries for the period 1969–1998 to study the relationship between economic growth and foreign debt. They found that huge foreign debt has a negative impact on economic growth because such a huge foreign debt will negatively influence the physical capital accumulation and total factor productivity growth. Reinhart and Rogoff (2010, 2011) used the data from 44 countries over two centuries to study the relationship between economic growth and debt. They identified an inverted U-shaped relationship between debt and economic growth so that, when external debt as a share of GDP is more than 60%, external debt will hinder economic growth. This proved the view of Cohen (1995), who thought that when a country has a heavy burden of external debt, to repay the debt principal and interest will reduce domestic investment, which, in turn, will hinder economic growth (Yong,Yang &et.al,(2015) .

Krugman (1988), Sachs (1989), and Anyanwu (1994), supposes that the impact of the debt overhang occurs when investors anticipate an increase in the tax rate on returns to the capital for debt servicing, causing them to reduce their investment levels in order to avoid future tax increases. Neoclassical models presume that imposing taxes for interest payments reduces individuals' disposable income and thus taxpayer savings (John, Serieux & Yiagadeesen , Samy, 2001).

3. Main External Debt Trend in Developing Countries

The total external debt stocks of developing countries recorded US$9.1 trillion in 2019, more than doubling their value of US$4.4 trillion in 2009 and more than four-fold their level of US$2.2 trillion in 2000. Excluding China, the external debt stock of the top ten borrowers (Argentina, Brazil, India, Indonesia, Mexico, the Russian Federation, Thailand, Turkey, and South Africa) increased by 4.1% on average in 2019 to $3.6 trillion. This increase in external indebtedness was not offset by sufficiently strong growth in the developing world's gross domestic product (World Bank, 2021). Overall external debt stocks have not only increased significantly across all developing regions over the last decade but this increase has also been accompanied by an increase in the share of short-term debt and total private non-guaranteed debt, as shown in the figure below (UNCTAD,2020).

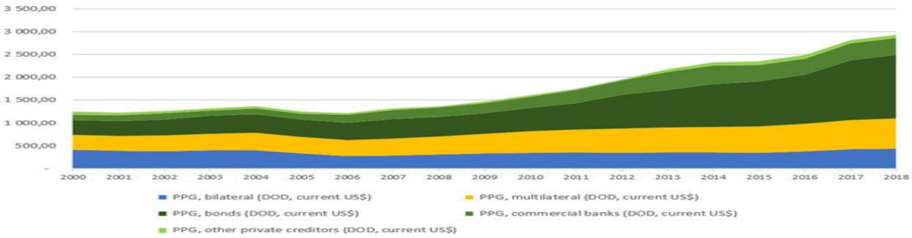
External Debt Stocks of Developing Countries, 2010–19



Source: World Bank, 2021, International Debt Statistics Report.

While official bilateral and multilateral creditors maintain an approximately stable share of developing countries' debt in absolute terms, private creditors have increased their share significantly.

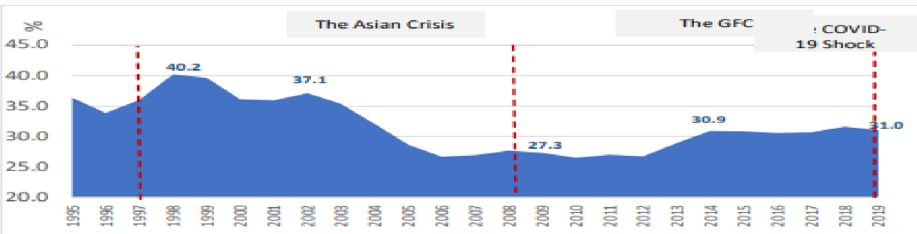
Evolution of External Debt of DC by type of lender (in billions of $US)



Source: Eric ,Toussaint& Milan, Rivié,(2020)," Threats over the external debt of Developing Countries", CADTM International ,academic article,p.5.

Despite the fact that most developing countries have taken steps to reduce their external debt burdens since the global financial crisis (GFC), many are implementing debt maturity compositions that pose threats and weak resilience to unexpected shocks. Given the slowing growth in developing countries' economies since the global financial crisis of 2007-2008, the average ratio of external debt to GDP has risen from 27% in 2008 to 31% in 2019 (Sarah,El-Khishin & Mahmoud, Mohieldin, (2020).

External Debt as Percentage of GDP in Developing Countries (1995- 2019)



Source: Sarah,El-Khishin & Mahmoud, Mohieldin.(2020)," External Debt Vulnerability in Emerging Markets and Developing Economies During the Covid-19 Shock", ERF.

4. External Debt & Economic Growth in Selected EMDEs

The following section illustrates a brief presentation of the situation of external debt and its relation to growth and development in a number of countries. The criterion that we use for selection is the income level; the selected countries are middle-income groups. The countries selected based on the convergence of their external debt indicators in 2019, mainly external debt-to-GDP ratio, external debt-to-exports ratio and external debt service-to-exports ratio as indicated from the following table.

External Debt Indicators in 2019 (Egypt, Brazil, Mexico, Pakistan and Morocco)

	Total External Debt USB$	**External Debt % GDP**	**External Debt % Exports**	**Debt Service % Exports**
Brazil	569.4	31.6	199.61	53.23
Mexico	469.73	37.02	92.61	12.32
Pakistan	100.82	36.24	324.05	35.35

Source: World Bank

4.1 External Debt and Growth in Brazil

After spending the 1980s attempting to repay external debt, Brazil's net external debt was US$ 120 billion, or 23 % of GDP, in 1990. By the end of 1995, this figure had risen to US$ 160.9 billion, or more than 21% of GDP. After a 15-year absence, the Brazilian government re-entered the international capital market in 1995, issuing sovereign bonds with great success. As of 1996, the Brazilian government had also adopted a strategy of repurchasing restructured debt (Brady Bonds) and replacing it with new bonds, totaling US$25.5 billion in sovereign debt issued in diverse markets (IMF &WB, 2002).

Since the early 1990s is that, multilateral trade liberalization was accelerated, along with efforts to promote preferential trade on a regional scale. The share of imported producer goods in the productive processes has changed significantly, greater access to the international capital market, combined with the attractiveness to foreign investors, has aided the financing of foreign currency needs. Furthermore, the monetary authorities have pursued active policies aimed at reducing public indebtedness in the external market, and taking parallel actions to increase the stock of foreign currency reserves (Renato, Baumann, (2010).

Table (1) Brazilian External Debt Indicators (1991- 2010)

	1991	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**	**1999**	**2000**	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**
Total External Debt(b$)	121.	129.5	144.5	152.9	160.9	181.	198.9	241.9	245.1	242.1	229	221	274.2	198.5	138.1	117.4	121.6	111.2	148.6	352.3
Debt Service (b$)	8.3	8.7	11.2	15.9	21.6	25.2	38.6	51.4	68.1	61.3	50.0	52.0	58.3	53.7	62.9	62.2	55.0	56.5	44.5	45.8
External debt, long-term	93.7	104.6	112.97	120.5	129.5	145	164.1	207.2	206.5	209.3	192	187	182.4	169.8	163.8	173.4	198.6	225.7	237.3	282.4
External debt, shortterm	26.3	24.09	31.32	32.18	31.23	35.9	34.85	29.88	29.23	30.97	28.2	23.4	24.59	25.27	23.99	20.32	39.25	36.64	39.79	65.49
PPG, Official Creditors	29.2	31.10	29.47	29.19	28.35	25.8	22.73	28.38	29.38	29.84	29.2	31.5	30.22	27.80	26.21	25.78	26.54	29.40	32.70	41.55
PPG, Private Creditors	56.6	60.37	62.59	66.65	70.41	70.9	65.53	70.79	63.65	66.78	67.3	68.1	69.85	69.65	68.15	58.78	53.33	50.52	54.81	55.93
Short-term Debt/TED	21.6	18.5	21.6	21.0	19.4	19.7	17.5	12.3	11.9	12.7	12.2	10.0	10.4	11.4	12.7	10.4	16.4	13.9	14.1	18.5
External Debt \GDP	20.5	32.9	33.8	28.4	21.2	21.0	20.2	29.3	43.1	35.1	40.5	45.2	41.6	34.4	32.2	28.8	22.1	20.1	16.6	15.9
Reserves(%ED)	7.7	18.3	22.3	25.3	32.2	33.0	26.2	18.3	14.8	13.3	15.6	16.3	20.9	24	28.7	44.7	75.3	73.3	84.2	81.9
ED % of exports	338	315.9	322.0	298.5	286.9	314.	308.3	380.0	419.0	360.1	329	321.	274.6	198	138.3	119	121	109	148	141.1
Debt Service % exports	23.4	21.2	25.1	31.2	38.5	43.6	59.8	80.7	116.5	87.0	71.7	72	67.9	48.4	46.2.8	38.2	28.1	23.5	23.2	18.4
Some Macro Economic Indicators (1991- 2010)																				
GDP %	1.5	-0.4	4.6	5.3	4.4	3.2	3.3	0.3	0.2	4.3	1.3	3.0	1.1	5.7	3.2	3.9	6.0	5.0	-0.1	7.5
CA/GDP	-0.2	1.5	0.004	-0.2	-2.3	-2.7	-3.4	-3.9	-4.2	-3.6	-4.1	-1.5	0.74	1.7	1.5	1.2	0.11	-1.6	-1.4	-3.5
Investment/	19.	18.	20.8	23.	17.	17.	23.	19.	17.	18.	18.	17.	16.	17.	17.7	17.	19.	24.	18.	21.

GDP	7	9		9	2	2	7	1	3	9	7	4	8	9		8	8	4	7	8
Saving/GDP	20.5	21.4	22.2	22.9	15.3	15.0	21.1	16.7	15.5	16.6	16.5	18.2	19.0	21.3	20.6	20.5	21.1	24.6	18.3	20.7
Resources Gap %GDP	0.8	2.5	1.4	-1.0	-1.9	-2.2	-2.6	-2.4	-1.8	-2.3	-2.2	0.8	2.2	3.4	3.1	2.7	1.3	0.2	-0.4	-1.1
Exports ofG&S(%GDP)	8.68	10.87	10.50	9.67	7.53	6.73	6.98	7.03	9.56	10.19	12.3	14.2	15.18	16.55	15.24	14.37	13.33	13.53	10.85	10.87
Imports ofG&S(%GDP)	7.91	8.39	9.10	10.67	9.46	8.91	9.59	9.41	11.42	12.45	14.5	13.3	12.96	13.13	11.84	11.67	11.96	13.72	11.25	11.91
Trade Gap (%GDP)	0.76	2.48	1.41	-1.00	-1.93	-2.1	-2.61	-2.38	-1.85	-2.26	-2.1	0.84	2.22	3.41	3.40	2.71	1.36	-0.19	-0.40	-1.04
Foreign Reserves (b$)	9.3	23.7	32.2	38.8	51.8	60.1	52.2	44.4	36.3	33.0	35.8	37.8	49.2	52.9	53.7	85.8	180.2	193.7	138.5	288.5

Source: researcher based on data obtained from World Bank & IMF data base.

The data from the above table indicated that Brazil achieved high growth rates during 1993-1997 & 2004-2008 recorded an average of 4.5% and 4.8% respectively, this increase coincided with a slight decrease in external debt to GDP during the same period recorded on average 25% and 28%, also the investment-output ratio increased reached 23.7% in 1997 compared to 20.8% in 1993 and 25% in 2008 compared to 18% in 2004. compared to the period from1974 to 2003, Brazil faced a fluctuated economic growth, as economic growth reach a modest rate on average 1.5% coincided with an increase in external debt causing a rapid increase in debt indicators where the external debt to GDP during the same period recorded on average 39.5%, A concurrent phenomenon is a decline in gross investment as Investment to GDP decreased to 16.8% in 2003 compared to 19.1% in 1998. Based on that analysis, it is noted that when external debt exceeds rational levels, further debt accumulation will result in growth worsening, implying that there is an optimal level of debt that promotes economic growth. Debts reached US$ 274 billion in 2003, up from US$ 160 billion in the mid-1990s, but by using those debts to finance development, Brazil was able to alleviate the burden and achieve relative stability and a decrease in external debt to GDP between 2004 & 2008.

The economic outcomes between 2004 and 2008 was distinguished by fiscal surpluses, high rates of real GDP growth, current account surpluses, increased international trade, a decrease of debt. Central Bank implemented a tight monetary policy in order to keep inflation under control, while also deepening the process of financial liberalization. During that time, the average primary fiscal surplus was around 4.5% of GDP. In this context, prior to the global financial crises, the Brazilian economy was significantly better protected, owing to improved macroeconomic aspects (Fernando, Ferrari & Luiz, Fernando, (2015).

This has resulted in a significant shift in the composition of external commitments. The external debt was 111.2 billion in 2008 compared to 274.2 billion in 2003, the debt-to-exports ratio was 109 % in 2008 compared to 274.6 % in 2003, and the external debt to GDP was 20.1 % in 2008 compared to more than 41% in 2003. Debt service fell from more than half of total export revenue in 2007 to less than 30%. Active policies enabled the country to develop foreign currency reserves that covered 84.2% of external debt in 2009, up from 20.9 % in 2003. This finding indicates that there is no substitute to sound, stable macroeconomic policies for limiting the adverse effect of external debt on economic growth. In the case of Brazil, good macroeconomic policies have softened the negative impact of debt, resulting in a positive impact on growth. Brazil was able to transform itself from a deteriorating economy until 2002 to one of the world's 20 largest economies in 2011. As noted from data, the increase in external debt to GDP during 2011-2016 coincided with a GDP slowdown from 2011-2014, followed by a strong recession in 2015-2016. Also the increase in external debt to GDP ratio during the same period coincided with downward trend in the investment to GDP ratio. Overall deficits increased from around 3% of GDP in 2010-2013 to 7.5 % in 2014-2017, owing to lower primary balances and higher interest payments. As a consequence, external debt rose from 15.8 % of GDP in 2011 to 30.4 % in 2016, while debt service to exports rose from 18.7 % of GDP in 2011 to 51% in 2016. External debt increased in 2019 to US$ 569.3 billion compared to US$404.0 billion in 2011. This increase in external debt was reflected in external debt indicators. Where the external debt to export ratio grew to 199.2% in 2019 compared to 128.1% in

2011, debt services to exports became about 53.1% compared to 18.7 in 2011, the international reserve to external debt recorded 62.1% in 2019 compared to 86.7 in 2011 and short term debt to external debt reached 14.0% in 2019 instead of 10.4% in 2011. During the period from 2011 to 2019, Brazil's external debt to GDP has been kept within safe limits; and according to the following data, the ratio of the external debt to GDP in brazil has grown annually recorded from 15.8 %in 2011 to 30.4% in 2016, dropped to 26.5 % in 2017, then kept rising to reach 31.6 % in 2019.

In terms of the maturity structure of Brazil's external debt, long-term external debt accounted for US$ 485.47 billion at the end of 2019, while short-term external debt accounted for US$ 79.94 billion. According to debtor data, PPG debt increased to reach US$43.17 billion in 2019 compared to US$36.59 billion in 2011, and private guaranteed debt increased to share around US$ 150.57 billion in 2019 compared to US$58.12 billion in 2011. Regarding a debt by creditor, the share held by private creditors has increased significantly when compared to official bilateral and multilateral creditors.

Table (2) Brazilian External Debt Evolution & Indicators (2011-2019)

	2011	2012	2013	2014	2015	2016	2017	2018	2019
Total External Debt(b$)	404.0	440.5	483.8	556.9	543.4	543.3	543.0	557.7	569.3
External debt, long-term	357.47	403.49	445.81	494.56	487.06	482.17	486.48	486.88	485.47
External debt, short-term	42.14	32.58	33.51	58.18	52.34	57.20	52.41	66.84	79.94
PPG, Official Creditors	36.59	39.02	39.33	42.41	42.08	41.06	48.33	47.86	43.17
PPG, Private Creditors	58.12	77.64	97.22	132.52	130.80	133.62	132.83	142.33	150.57
External Debt \GDP	15.8	18.4	19.7	22.8	30.0	30.4	26.5	29.9	31.6
External debt to exports (%)	128.1	151.7	165.3	204.9	240.3	235.8	196.9	193.5	199.2
Debt service to exports (%)	18.7	15.7	28.0	22.9	39.7	51.0	34.6	33.1	53.1

Reserves / external debt (%)	86.7	83.9	73.6	64.8	65.2	66.7	68.4	66.7	62.1
Short term debt %ED	10.4	7.4	6.9	10.4	9.6	10.5	9.7	12.0	14.0
Some Macro Economic Indicators (2011-2019)									
GDP %	3.97	1.92	3.00	0.50	-3.55	-3.28	1.32	1.32	1.14
CA/GDP	-2.92	-3.40	-3.23	-4.13	-3.02	-1.35	-0.73	-2.20	-2.77
Budget Balance %GDP	-3.8	-3.7	-4.6	-7.3	-9.8	-7.4	-6.5	-6.1	-5.2
Investment/GDP	21.83	21.42	21.69	20.55	17.41	14.97	14.63	14.83	15.11
Saving/GDP	21.06	20.06	19.39	17.89	16.26	15.37	15.35	15.21	14.78
Resources Gap %GDP	-0.77	-1.36	-2.30	-2.66	-1.15	0.40	0.72	0.38	-0.33
Exports of G&S(% of GDP)	11.58	11.88	11.74	11.01	12.90	12.47	12.52	14.89	14.32
Imports of G&S(% ofGDP)	12.35	13.24	14.04	13.67	14.05	12.07	11.80	14.51	14.65
Trade Gap (%GDP)	-0.77	-1.36	-2.30	-2.66	-1.15	0.40	0.72	0.38	-0.33
Foreign Reserves(b$)	350.4	369.6	356.2	361.0	354.2	362.5	371.2	371.9	353.5

Source: World Bank

According to Tuba Koyuncu's (2020) study that investigates the relationship between economic growth and external debt for the Brazilian economy from 1970 to 2015, the findings reflected that there was a long-term relationship between external debt and Brazil's growth rate. External debt was found to have a negative impact on economic growth. And relative to Frederico G. Jayme (2001) paper, which has studied the sustainability of the external debt in Brazil from 1969 to 2000. External debt and current account deficits are not sustainable in the long run, according to sustainability tests conducted over various time periods and using various models and variables. The early 1980s crisis was closely related to the external vulnerability presented by the indebtedness policy. The high stock of external debt, combined with the interest rate shock and the break-in capital inflows, makes managing current account deficits difficult, as well as making external debt repayments impossible.

4.2 External Debt and Economic Growth in Mexico

The following table shows the developments of the external debt stock and external debt indicators of Mexico during 2000 - 2019, where the external debt increased from US$152.6 billion in 2000 to US$ 469.7billion in 2019. Accordingly, the external debt service increased by USD 3.3 billion, to reach USD 62.5 billion by the end of 2019, compared to USD 59.2 billion at the end of 2000. From the beginning of 2000 to 2007, the external debt to GDP ratio fluctuated slightly between 18.6% and 21.9%, then recorded a general upward trend during 2008-2016 reached 39.12% in 2016 compared to 17.8% in 2008, then decreased during 2017-2019 from 38.10% in 2016 to 37.02% in 2019. The external debt to export ratio grew to 92.61% 2019 compared to 82.09% in 2000. The external debt service to export ratio recorded 12.32% in 2019 compared to 31.87% in the beginning of the period. The ratio of short-term debt to the total external debt during the period 2000-2019 didn't reach less than 8.7%, with a notable significant increase during 2007-2013. Although the maximum value of this percentage did not exceed 22.7% and that was in 2013. The economic trends of the external sectors indicated that, the current account balance was generally in deficit, as in every year since 1988, Mexico has registered a deficit in its current account, primarily due to the Government’s liberalization of trade policies that have increased private sector imports. In 2019, Mexico’s current account registered a deficit of 0.34% of GDP compared to 2.07% in 2018 and 2.65% in 2000. In a few years, Mexico’s exports expanded as a share of GDP, reaching 38.83% from GDP compared to 25.41% in 2000, but Mexico’s trade deficit with the rest of the world still exist, as the export boom was compensated by the expansion of imports, as the ratio of import to GDP also consistently grew for most of the period recording

39.08% from GDP in 2019 compared to 27.03% in 2000. These growth trends led to the tight trading gap to GDP ratio from -1.62% in 2000 to -0.25% in 2019. The accumulation of external reserves increased broadly as it recorded US$183.0 billion at the end of 2019 compared to only US$ 35.58 billion in 2000. Regarding the growth rates during 2000-2019, at the beginning of that period growth rate recorded 4.94% in 2000 compared to 2.75% in previous year. In spite of achieving modest growth rates during the period, the Mexican economy achieved high growth rates recording 4.50% and 5.12% in 2006 and 2010. Mexico GDP increased by 2.0% during 2018. This reflects slower growth as compared to an increase of 2.1% in 2017 and an average increase of 3.0% in 2014 through 2016, as a decrease in exports to GDP and increase of imports to GDP at the same time also it's noted that the decrease in investment to GDP during the same year. Mexico’s GDP actually decreased in 2019 by 0.05% as an economic impact of the Covid-19 epidemic, which spread globally and rapidly. With respect to the external debt to GDP ratio which increased annually during 2010-2013, it's noted that this increase coincided with the decreased in growth rates also, however the increase in external debt to GDP ratio during 2013-2015 coincided with an increase in growth rates.

Mexico External Debt Indicators (2000- 2019)																				
	2000	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**
Total External Debt(b$)	152.6	166.1	157.3	158.7	165.9	170.8	170.6	196.1	197.7	193.3	245.9	291.8	349.3	406.2	442.4	426.9	421.9	441.6	453.2	469.7
Debt Service (b$)	59.2	47.7	37.7	32.4	39.7	36.5	54.6	38.0	35.4	31.8	32.7	42.2	70.8	41.6	49.4	52.3	78.3	65.4	58.3	62.5
External debt, long-term	133.2	151.1	133.0	135.4	145.1	148.2	143.9	168.3	173.0	163.3	198.5	235.0	269.0	309.3	346.4	352.7	365.0	385.1	388.0	403.1
External debt, short-term	18.9	14.6	23.9	22.9	20.3	22.2	26.3	27.4	24.2	25.6	43.1	52.4	75.9	92.5	91.9	70.3	53.1	52.4	61.1	62.7
PPG, Official Creditors	20.9	19.7	20.2	20.2	19.0	18.5	9.8	10.3	11.7	20.1	25.4	27.8	29.7	31.2	32.0	31.6	31.1	32.7	32.6	33.5
PPG, Private Creditors	61.9	76.3	81.1	88.8	93.2	97.0	95.7	110.6	116.7	98.8	120.5	136.5	166.2	188.8	215.5	227.8	235.6	253.9	262.6	270.3
Short-term Debt/TED	12.41	8.77	15.20	14.42	12.24	13.00	15.39	13.95	12.23	13.22	17.51	17.97	21.74	22.77	20.78	16.46	12.58	11.87	13.49	13.35
External Debt \GDP	21.55	21.95	20.37	21.76	21.21	19.47	17.49	18.63	17.81	21.48	23.25	24.72	29.08	31.88	33.64	36.43	39.12	38.10	37.07	37.02
Reserves(%ED)	23.28	26.94	32.17	37.16	38.66	43.35	44.71	44.43	48.12	51.51	48.91	49.35	45.93	43.18	43.15	40.63	41.13	38.60	37.83	37.72
ED % of exports	82.09	93.92	88.42	87.53	79.88	72.63	62.15	65.63	62.00	77.05	75.89	77.59	87.86	99.17	103.0	103.8	103.7	98.56	91.90	92.61
Debt Service % exports	31.87	26.96	21.19	17.85	19.10	15.51	19.90	12.73	11.09	12.67	10.11	11.21	17.82	10.15	11.51	12.71	19.27	14.59	11.81	12.32
Some Macro Economic Indicators (2000- 2019)																				
GDP %	4.94	-0.40	-0.04	1.45	3.92	2.31	4.50	2.29	1.14	-5.29	5.12	3.66	3.64	1.35	2.85	3.29	2.90	2.11	2.01	-0.05
CA/GDP	-2.65	-2.35	-1.93	-1.14	-0.90	-1.03	-0.36	-0.94	-1.51	-0.86	-0.46	-1.01	-1.55	-2.47	-1.93	-2.65	-2.26	-1.76	-2.07	-0.34
Budget Balance %GDP	-2.82	-2.71	-2.29	-2.36	-1.41	-1.50	-1.28	-1.53	-0.71	-2.33	-2.98	-2.42	-2.61	-2.31	-3.21	-3.50	-2.7	-1.06	-2.20	-2.33
Investment/GDP	22.96	20.84	20.71	21.10	22.12	21.64	22.82	23.12	24.11	22.89	22.79	23.28	23.89	22.49	21.87	23.31	23.62	22.90	22.73	21.09
Saving/GDP	22.55	21.22	19.96	18.74	21.19	20.85	22.39	22.43	22.34	22.25	22.88	23.42	23.33	21.34	21.94	22.27	22.47	23.16	23.67	23.76
Resources Gap %GDP	-0.41	0.38	-0.75	-2.36	-0.93	-0.79	-0.43	-0.69	-1.77	-0.63	0.09	0.14	-0.56	-1.15	0.07	-1.04	-1.15	0.26	0.94	2.67
Exports of G&S(%GDP)	25.41	22.67	22.55	24.36	25.84	26.23	27.33	27.53	27.70	27.15	29.70	31.04	32.27	31.31	31.87	34.52	37.04	37.65	37.26	38.83

Imports of G&S(%GDP)	27.03	24.50	24.15	25.85	27.65	27.71	28.77	29.27	30.08	28.81	31.06	32.43	33.50	32.46	33.05	36.56	39.02	39.46	40.30	39.08
Trade Gap (%GDP)	-1.62	-1.83	-1.59	-1.48	-1.81	-1.47	-1.44	-1.74	-2.37	-1.66	-1.36	-1.40	-1.24	-1.15	-1.18	-2.04	-1.98	-1.81	-3.04	-0.25
Foreign Reserves (b$)	35.58	44.80	50.67	59.03	64.20	74.11	76.33	87.21	95.30	99.89	120.5	149.2	167.0	180.2	195.6	177.6	177.9	175.4	176.3	183.0

Source: World Bank & IMF Database.

Mexico's external position is relatively strong, as external debt relative to GDP has been declining since 2016, and the maturity and currency structure seem to be well-diversified. The economy remains flexible, supported by a strong macroeconomic policy framework. In a credible framework, fiscal and monetary policies have been prudent. Reduction of the vulnerabilities was achieved by reducing dependence on public debt financing, raising the use of fixed rates, and lowering the public debt-to-GDP ratio. In recent years, external private and public debt has remained relatively stable. Foreign reserves are adequate. Because of declining public deficits and a flexible exchange rate, the country has maintained a small current account deficit. The current account deficit is still totally financed by foreign direct investment inflows, which have remained broadly stable and have been a major factor in reducing reliance on external borrowing, which has kept Mexico's external indebtedness condition continually improving. According to the IMF's debt sustainability analysis, Mexico's external debt remains moderate and is expected to remain stable in the medium term (OECD, 2019).

4.3 External Debt and Economic Growth in Pakistan

After remaining significantly higher in the eighteens and nineties, the external debt burden has shown significant improvement in the 2000s. This improvement was noticed as a result of a large debt re-profiling granted by Paris Club creditors in 2002, as well as a general economic recovery in the country. However, the effect of these advancements has been diminished by a significant increase in the country’s current account and fiscal deficits in 2007 and 2008 as a result of a strong increase in aggregate demand. Following that, data show an improvement in the external debt burden since 2011 (Sabina , Khurram,(2008).

The following table shows the developments of the external debt stock and indicators of Pakistan during 2000-2019. In general, the external debt stock increased from US$ 33.0 billion in 2000 to US$ 100.8 billion in 2019, long term debt reached US$83.20 billion in 2019 compared to only US$ 29.82 billion in 2000. Pakistan has followed a debt strategy which has resulted in nearly half of the country's debt being reduced. The external debt to GDP ratio has fallen from 51.30 % in 2000 to 27.25 % in 2007. Similarly, the ratio of external debt to exports fell from 327.1 % to 181.41 % in 2007, and the ratio of debt services to exports fell from 28.39 % to 10.85 % in 2007. According to the data, since 2008, when the country's current account and fiscal deficits began to rise again, reaching 9.20 % and 7.06 % of GDP, respectively, the external debt indicators have worsened again, with external debt to GDP recording 27.74 %, 31.28 %, and 34.12 % in 2008, 2009, and 2010, respectively, a higher inflow of external loans has resulted in a worsening of the ratio of external debt to foreign reserves. Pakistan's debt burden decreased from 2011 to 2016, as external debt to GDP improved, reaching 24.35 % compared to 31.71 % in 2011. Foreign reserves reached 26.90 % compared to 22.45 % in 2011. This improvement in the external debt to GDP ratio coincided with significant economic gross rates of 4.67 %, 4.73 %, and 5.53 % in 2014, 2015, and 2016, respectively. However, external debt to GDP increased in 2017, 2018, and 2019, reaching 27.37 %, 30.22 % and 36.24 % respectively.

Table(3) Pakistan External Debt Indicators (2000- 2019)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	
Total External Debt(b$)	33.09	32.03	33.95	36.64	36.53	34.24	37.40	42.28	49.80	56.63	63.10	64.72	62.57	58.57	62.19	66.69	73.04	86.03	93.53	100.8	
Debt Service (b$)	2.87	3.00	2.88	3.07	4.29	2.47	2.32	2.67	3.03	3.47	4.32	2.98	4.91	6.94	4.82	4.11	4.32	6.77	6.02	11.00	
External debt, long-term	29.82	28.69	30.14	33.04	33.15	31.27	34.36	38.40	43.82	46.12	48.17	51.14	50.86	48.80	51.70	53.86	58.69	69.66	78.17	83.20	
External debt, short-term	1.52	1.31	1.54	1.25	1.25	1.23	1.32	2.23	1.37	1.47	4.67	3.62	4.03	4.65	5.49	6.47	7.12	8.71	8.09	9.53	
PPG, Official Creditors	25.26	25.33	27.36	30.92	30.88	29.11	31.46	34.46	37.76	40.53	42.05	43.73	43.59	42.21	41.72	42.84	45.24	50.37	56.41	62.19	
PPG, Private Creditors	2.01	1.26	0.78	0.50	0.73	1.20	2.00	2.75	2.87	2.32	1.65	1.65	1.65	1.78	5.25	6.28	7.32	10.69	10.85	8.92	
Short-term Debt/TED	4.59	4.10	4.54	3.40	3.41	3.59	3.53	5.27	2.75	2.59	7.40	5.59	6.44	7.94	8.82	9.71	9.75	10.12	8.65	9.45	
External Debt \GDP	51.30	41.35	40.60	40.48	39.93	33.90	28.52	27.25	27.74	31.28	34.12	31.71	29.04	26.24	26.13	24.45	24.35	27.37	30.22	36.24	36.24
Reserves(%ED)	4.57	11.36	23.80	29.86	26.82	29.30	30.86	33.22	14.45	19.98	22.74	22.45	16.37	8.80	18.98	26.73	26.90	18.32	9.81	13.31	
ED % of exports	327.1	302.6	276.3	245.0	224.8	173.2	174.7	181.41	185.9	247.1	219.5	200.4	195.7	191.7	199.9	227.9	265.1	284.8	297.2	324.0	
Debt Service % exports	28.39	28.36	23.45	20.53	26.38	12.48	10.85	11.45	11.32	15.15	15.03	9.24	15.36	22.72	15.49	14.04	15.69	22.43	19.14	35.35	
Some Macro Economic Indicators (2000- 2019)																					
GDP %	4.26	3.55	2.51	5.78	7.55	6.52	5.90	4.83	1.70	2.83	1.61	2.75	3.51	4.40	4.67	4.73	5.53	5.55	5.84	0.99	

CA/GDP	-0.10	2.36	4.82	3.89	-0.76	-3.00	-4.92	-5.45	-9.20	-2.37	-0.76	-1.03	-1.04	-1.91	-1.50	-1.04	-2.58	-5.31	-6.00	-2.57
Budget Balance %GDP	-4.01	-3.06	-3.31	-0.15	-1.62	-2.81	-3.29	-5.12	-7.06	-5.05	-6.01	-6.73	-8.63	-8.37	-4.85	-5.25	-4.42	-5.76	-6.42	-8.98
Investment/GDP	17.58	17.40	16.12	16.67	16.43	17.72	19.33	18.79	19.21	17.55	15.80	14.12	15.08	14.96	14.64	15.71	15.69	16.15	17.34	15.61
Saving/GDP	16.45	16.44	16.03	17.21	17.37	14.19	11.92	12.23	8.38	10.27	9.97	9.11	7.06	8.18	8.22	9.26	8.67	6.81	6.24	5.41
Resources Gap %GDP	-1.12	-0.96	-0.08	0.54	0.94	-3.53	-7.41	-6.56	-10.8	-7.28	-5.84	-5.01	-8.01	-6.78	-6.42	-6.45	-7.01	-9.34	-11.1	-10.2
Exports of G&S(%GDP)	12.12	13.34	13.78	15.17	14.24	14.31	14.13	13.21	12.38	12.40	13.52	13.97	12.40	13.28	12.24	10.60	9.15	8.26	8.97	10.12
Imports of G&S(%GDP)	13.24	14.29	13.86	14.63	13.30	17.84	21.55	19.78	23.21	19.68	19.35	18.97	20.41	20.06	18.66	17.05	16.16	17.60	20.07	20.32
Trade Gap (%GDP)	-1.12	-0.96	-0.08	0.54	0.94	-3.53	-7.41	-6.56	-10.8	-7.28	-5.84	-5.01	-8.01	-6.78	-6.42	-6.45	-7.01	-9.34	-11.1	-10.2
Foreign Reserves (b$)	2.09	4.22	8.80	11.82	10.72	11.11	12.88	15.80	9.02	13.61	17.26	17.70	13.69	7.65	14.31	20.03	22.03	18.46	11.84	16.59

Source: World Bank & IMF Databas

According to Shah Muhammad (2016) study, which investigates the impact of external debt burden on economic growth for Pakistan in the period 1960-2007, debt-servicing has an adverse impact on economic growth. The long-run relation between debt services and economic growth implies that future increases in output will drain away in form of high debt service payments. The long-run relationship between debt service and economic growth indicates that future output gains will be offset by high debt service payments. And according to Muhammad Azam's (2020) study, which examines the impact of external debt on Pakistan's economic growth employing annual time series from 1976 to 2018. The empirical findings suggest that external borrowing and debt servicing are impeding Pakistan's economic growth. According to the findings, a 1% raises in external debt causes a 0.20 % drop in economic growth.

5. Conclusion and Policy Recommendation

The evolution of the external debt problem in developing countries with particular reference to Brazil, Mexico and Pakistan reflects that, the statistical indicators showed an adverse effect of external debt on economic growth. The analysis also finds that fiscal expenditure, the balance of payments and the global interest rate are the crucial factors in explaining the accumulation of external debt in developing countries. The increase in external debt in developing countries not only increased markedly in two past decades but also this increase has been accompanied by a rising share of short-term debt, PPG from private creditors, which exposes them to higher risk profiles of debt contracts.

Policymakers must decide what to do in light of previous debt waves' lessons. Specific policy priorities ultimately depend on country situations, but broad strands of policies can help contain the risks associated with recent debt accumulation; in general, the following can be recommended:

- *Debt management strategies:* higher levels of government or private debt, as well as a riskier composition of debt (in terms of maturity, currency denomination, and creditors), are related to the risk of a crisis. As a result, reasonable debt management and transparency will aid in lowering borrowing costs, improving debt sustainability, and reducing fiscal risks. Debt must be more flexible in composition; prudent debt management prefers debt contracted on terms that maintain macroeconomic and financial strength, preferably at longer maturities and at fixed (and favorable) interest rates.

- *Macroeconomic policies:* Strong monetary, exchange rate, and fiscal policy frameworks can protect the developing economies in a highly volatile global economic environment. Fiscal improvements should concentrate more on revenue generation, re-directing expenditures, and improving spending efficiencies-all with the goal of achieving sustainable development goals, such as increasing taxation of negative 'SDG externalities', as carbon taxation that could diversify tax revenue collection, Furthermore, taxing the digital economy, and corrective taxes targeting public health issues such as alcohol, tobacco, and sugary beverages. In the face of today's fiscal constraints, revenue and expenditure policies must be adjusted to expand fiscal resources for priority spending. Public spending can be reallocated to uses that are more likely to boost future growth, such as education and health spending, as well as climate-smart infrastructure investment. Governments also can take steps to encourage private-sector growth. Increased private sector growth, in turn, could broaden the revenue base and, ultimately, strengthen government revenues.

- *Financial development:* The development of financial markets can aid in the mobilization of domestic savings, which could provide more steady sources of financing than capital inflows. Creating new financial instruments to the market, such as inflation-indexed bonds and exchange-traded funds, as well as broadening the bond market to attract private savings, are critical steps toward developing the capital market. This necessitates an enabling environment of strong institutions, creditor rights protection, high regulatory quality, and macroeconomic stability. At the same time, excessively rapid growth in financial markets can increase the risks to financial stability. It is therefore critical to strike a careful balance between measures to promote financial market deepening and supervision.

- *Institutional strengthening*: weak corporate governance was a popular shortcoming, particularly in some East Asian countries. Along with ineffective bank regulation, this resulted in inefficient corporate investment, as borrowed funds were used for purposes that did not increase export proceeds, productivity, as well as potential output, as banks lent to firms without stringently evaluating their creditworthiness. Well-enforced frameworks for sound corporate governance could indeed help ensure that private corporations' borrowed funds are used wisely. Even with large-scale fiscal stimulus to support today's steadily declining activity, money must be spent wisely. Governments should pay more attention to debt management, to items of expenditure, and try to direct it to productive use.

Based on that, the following important conclusions can be drawn, most developing countries have high external indebtedness; borrowed funds have been misdirected to current expenditure and unproductive investments. And this indebtedness has resulted in economic deterioration as a result of directing the majority of its resources toward debt service. Because of the differences in developing countries, in terms of the size and nature of the debt problem, as well as levels of growth, each country's external debt must be addressed separately. Despite the introduction of several international initiatives to reduce the debt problem since the 1980s, whether on the part of creditor or debtor countries or financial institutions, the majority of these initiatives offered significant debt stock reduction, but debt relief under it was protracted or frequently required multiple restructurings to achieve sustainable debt levels, and the desired objectives were not met. Developing countries are still looking for alternatives and solutions to their external debt crisis. In general, developing countries should use their externally borrowed resources for productive purposes so that the government can generate revenue and have a better repayment capacity. This can lead to significant economic growth while also removing the debt's disincentive effect and attracting investment. To accomplish this, the government takes debt-based projects seriously in order to generate revenue and repay debt services on time. Furthermore, externally borrowed funds should not be diverted into current expenditure, loan repayment, or unproductive projects. Instead, the government should direct externally borrowed funds toward long-term investment projects, allowing the country's manufacturing sector growth rate to accelerate.

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