



# A 50-Year Economic Analysis of Mexico's Economy (1971-2020)

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**How to cite this paper:** Mavrokordatos, P. and Stascinsky, S. (2023) A 50-Year Economic Analysis of Mexico's Economy (1971-2020). *Open Access Library Journal*, 10: e10233. <https://doi.org/10.4236/oalib.1110233>

**Received:** May 9, 2023

**Accepted:** June 23, 2023

**Published:** June 26, 2023

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## Abstract

This paper is going to concentrate on the North American Free Trade Agreement (NAFTA), specifically Mexico. In the present paper, the authors will do an extensive economic evaluation of one of the members of NAFTA, Mexico. In our attempt to do that, we are going to discuss briefly the history of Mexico, and then present and discuss the most recent literature, including some of the things that preceded the joining of NAFTA, as well as some of the things that took place afterward. In the third section of the paper, the authors are going to present some of the most important economic data for Mexico, including but not limited to the Gross Domestic Product (GDP), the Inflation Rate, the Unemployment Rates, etc. This data will be presented for 50 years (1971-2020) which gives us a good number of years before and after Mexico joined NAFTA.

## Subject Areas

Economics

## Keywords

Mexico, Economy, Analysis

## 1. Introduction/History

Mexico's history goes back to 2000 BC, and during all these years until now, Mexico went through a lot of changes, some good and some bad (Hamnett, 2006) [1]. For obvious reasons, we cannot discuss thousands of years of events in just a few lines. Below we are going to discuss two or three very important events in Mexican history.

Mexico in its history went through three great civilizations, which were the

Mayas, the Olmecs and the Toltecs. All three of these civilizations were before the empire of the Aztecs, which were eventually conquered by the Spanish between 1519 and 1521. The Mexicans gained their independence in 1821 after a revolution. The next several decades were not very good for Mexico. It lost Texas in 1836, and then after losing a war to the U.S. between 1846 and 1848, Mexico lost California, Nevada, Utah, most of Arizona and New Mexico, as well as parts of Wyoming and Colorado (Henderson, 2007) [2].

Another very important event in Mexico took place right after World War II. During that time, the Mexican government concentrated on economic growth, and as a result, in the mid-1970s Mexico became a major petroleum producer. This brought some negatives to the Mexican economy (The World Fact Book, 2008) [3]. Since Mexico was a major petroleum producer, it started borrowing against its reserves. But when oil prices dropped in the 80s, Mexico was not able to meet its international debt. The end resulted from this was devastating for the Mexican economy. Rising unemployment and inflation forced the population to migrate from the rural areas to the cities as well as the United States (Enriquez, 2007) [4]. The next major event was in 1992, and this is when Mexico, Canada and the United States negotiated the North American Free Trade Agreement (NAFTA). This actually turned out to be a very good move for Mexico, because later in 1994 when the peso collapsed, and the overall financial system in Mexico was in trouble, the U.S. came to the rescue with \$12.5 billion (Sarkar & Park, 2001) [5]. The economy finally was turned around, and Mexico was able to pay the debt three years ahead of schedule.

## 2. Current Literature

Mexico is a country with a population of about 120 million (2020), which had and still has its own economic ups and downs over the years. The purpose of this section is to present and discuss these ups and downs at the present time.

Although Mexico has recovered from one of the worst recessions it had during 1994, it still faces some major economic problems, such as low real wages, underemployment for a very large percentage of the population, unequal distribution of income and very few opportunities for advancement. The Mexican economy is a free market economy, and it is of the caliber of multi trillion dollars. Some of the most important components of this multi trillion-dollar economy are the following: some modern industry and agriculture, mostly privately owned, and during the last several years the different administrations of Mexico started expanding into seaports, railroads, telecommunications, electricity, just to name a few areas, as well as expanding trade with the U.S. and Canada since the implementation of NAFTA since 1994 (Adibi & Doti, 2001 [6]; Mavrokordatos, 1996 [7]; Mavrokordatos, 1997 [8]).

Previously we mentioned that the economy of Mexico is characterized by industry and agriculture (Mavrokordatos, 1994 [9]; Mavrokordatos, 1994 [10]; Nica *et al.*, 2006 [11]). The agricultural production includes corn, wheat, soy-

beans, rice, beans, cotton, coffee, fruit, tomatoes, beef among other things, and the industrial production (2020 negative growth  $-9.94$ ), includes food and beverages, tobacco, chemicals, iron and steel, petroleum, mining, motor vehicles and consumer durables. Another important component of the Mexican economy is trade (The Columbia Electronic Encyclopedia, 2007) [12]. In 2020, Mexico exported \$435 billion of US dollars, and that included manufactured goods, oil and oil products, silver, fruits, vegetables, coffee and cotton. The majority of these exports went to the US, and a good portion to Canada and Spain.

On the other hand, again in 2020, Mexico imported \$423 billion, and again the majority was from the U.S., with China, Japan and South Korea following. Finally when we put all this information together, we have an economy with a GDP of \$1.150 trillion, a growth rate of  $-8.31\%$ , a per capita GDP of \$8900, an unemployment rate of  $4.45\%$  and an inflation rate of  $3.39\%$ , and these basically summarize the economic picture of Mexico during 2020.

The data presented for 2020, does not necessarily show a bad economy, other than the negative growth rate of  $8.31\%$ .

In concluding this section, we would like to repeat something that is well known, that Mexico is one of the most important trade partners of the U.S., and the U.S. is the most important trade partner of Mexico. As a result, Mexico's economy is heavily dependent on the U.S. economy.

### 3. Statistical Analysis

This next section, the Statistical Analysis section, is also the most important one. In this section, the authors are going to present a lot of economic data for Mexico (1971-2020), in order to do an evaluation of Mexico before and after NAFTA. The data will include but not limited to the Gross Domestic Product, the Unemployment Rates, the Inflation Rates, Exports and Imports just to name a few. The data will go as far back as 1971, and as recent as 2020. This particular time span gives us a number of years of data before NAFTA and a number of years after NAFTA, and it should be enough to help us derive some conclusions about the impact.

From **Table 1** and **Table 2**, we are going to derive several graphs, in order to make it easier for us to see and discuss the economic conditions in Mexico before and after the North American Free Trade Agreement.

What we can see in **Figure 1**, is that the GDP over the years has shown a steady growth, even though it had some ups and downs over the years, the population growth was not as much, although it was more than doubled during these years.

**Figure 2** shows the total trade of Mexico. Exports and imports are almost parallel to each other, with imports exceeding exports most of the time and this is why we have negative net exports, although they have been improving during the last few years.

**Figure 3** shows population and inflation, trying to find any connection. As

**Table 1.** Mexico data 1971-2020a.

	GDP CON.	GDP GR.	GDP PER	EXPORTS	IMPORTS	NET EXP.	INDUSTR.
YEAR	2015 US\$	RATE %	CAP.2015	X BIL.US\$	M BIL.US\$	X - M	OUT. GR. %
1971	283	3.76	5325.55	15.7	25.4	-9.7	1.29
1972	306	8.23	5593.72	17.9	29.4	-11.5	9.42
1973	330	7.86	5858.38	19.8	35.5	-15.7	10.13
1974	349	5.78	6021.22	19.8	41.9	-22.1	5.98
1975	369	5.74	6191.81	20.2	40.2	-20	4.57
1976	385	4.41	6292.8	21.7	37.8	-16.1	4.82
1977	398	3.39	6337.72	25.7	30.9	-5.2	1.52
1978	434	8.95	6731.41	31.5	37.7	-6.2	10.34
1979	476	9.69	7202.31	37.4	48.8	-11.4	10.93
1980	520	9.23	7677.2	45.7	67	-21.3	7.86
1981	565	8.52	8134.11	50.9	78.8	-27.9	8.86
1982	562	-0.52	7903.74	62.4	49	13.4	-2.61
1983	542	-3.48	7455	71.3	32.4	38.9	-9.89
1984	561	3.41	7538.89	75.4	38.2	37.2	4.95
1985	573	2.18	7538.47	72	42.4	29.6	5.48
1986	555	-3.07	7154.24	75.2	39.2	36	-5.91
1987	565	1.72	7130.37	82.4	41.2	41.2	2.82
1988	572	1.28	7079.85	87.1	56.3	30.8	2.77
1989	595	4.1	7229.12	89.1	68.3	20.8	6.13
1990	626	5.17	7460.69	92.3	81.8	10.5	6.71
1991	653	4.21	7632.44	96.6	95.5	1.1	3.36
1992	676	3.54	7760.91	98.2	115	-16.8	4.37
1993	689	1.94	7773.16	102	114	-12	0.29
1994	723	4.94	8018.72	111	134	-23	5.55
1995	677	-6.29	7390.71	133	113	20	-10.88
1996	723	6.77	7765.6	154	133	21	11.82
1997	773	6.84	8168.91	168	163	5	7.89
1998	813	5.16	8461.49	181	187	-6	5.97
1999	835	2.75	8567.08	190	209	-19	1.53
2000	876	4.94	8861.87	213	251	-38	4.39
2001	873	-0.4	8702.98	211	249	-38	-2.18
2002	873	-0.03	8580.88	212	252	-40	-1.5
2003	885	1.44	8587.09	216	259	-43	1.76
2004	920	3.92	8801.32	238	275	-37	3.85

**Continued**

2005	941	2.3	8877.85	253	290	-37	2.15
2006	983	4.49	9142.8	272	315	-43	4.13
2007	1010	2.29	9214.35	278	331	-53	0.93
2008	1020	1.14	9181.4	275	341	-66	-1.05
2009	964	-5.28	8568.62	245	287	-42	-7.47
2010	1010	5.11	8878.56	300	336	-36	4.53
2011	1050	3.66	9076.3	323	355	-32	2.85
2012	1090	3.64	9280.26	344	374	-30	2.84
2013	1100	1.35	9282.99	349	382	-33	-0.22
2014	1130	2.84	9426.32	373	405	-32	2.57
2015	1170	3.29	9616.64	405	428	-23	1.1
2016	1200	2.63	9751.56	419	441	-22	0.32
2017	1230	2.11	9842.4	437	469	-32	-0.25
2018	1260	2.19	9945.77	463	499	-36	0.43
2019	1250	-0.17	9820.44	470	495	-25	-1.81
2020	1150	-8.31	8909.68	435	423	12	-9.94

Source: The World Bank <https://databank.worldbank.org/> (2022). IMF International Financial Statistics (IFS); National Income of China, the Directorate General of Budget, Accounting and Statistics, Executive Yuan; Economic and Social Research Institute, Economic Planning Agency, Japan <http://investtaiwan.org/> (2021). GDP Constant 2015 Billions US\$, GDP per Capita Constant 2015 Thousands US\$, Exports (X) Constant 2015 Billions US\$, Imports (M) Constant 2015 Billions US\$, Net Exports (X - M) Constant Billions US\$. Source: The World Bank <https://databank.worldbank.org/> (2022).

**Table 2.** Mexico data 1971-2020b.

YEAR	INFL. %	LABOR	UNEMPL.	POP. MI.
		FORCE MI	%	
1971	5.46			53.07
1972	4.94			54.69
1973	12.08			56.32
1974	23.78			57.97
1975	14.94			59.61
1976	15.82			61.24
1977	29.06			62.87
1978	17.45			64.49
1979	18.19			66.12
1980	26.35		3.5	67.76
1981	27.93		2.3	69.4

**Continued**

1982	58.91		3.3	71.06
1983	101.87		4	72.71
1984	65.44		3	74.35
1985	57.74		2.5	75.98
1986	86.23		3	77.59
1987	131.82		4.2	79.2
1988	114.16		5.5	80.79
1989	20		5.3	82.37
1990	26.65	29.5	5.6	83.94
1991	22.66	30.34	3.15	85.51
1992	15.5	31.58	3.24	87.07
1993	9.75	32.83	3.37	88.62
1994	6.96	33.64	4.44	90.16
1995	34.99	34.43	7.1	91.66
1996	34.37	35.21	5.47	93.14
1997	20.62	36.79	4.24	94.61
1998	15.92	37.62	3.73	96.06
1999	16.58	37.91	2.6	97.48
2000	9.49	38.54	2.65	98.89
2001	6.36	38.81	2.63	100
2002	5.03	39.37	3	102
2003	4.54	40.42	3.46	103
2004	4.68	41.65	3.94	105
2005	3.98	42.86	3.56	106
2006	3.62	44.35	3.57	108
2007	3.96	45.3	3.63	109
2008	5.12	46.19	3.87	111
2009	5.29	47.17	5.36	112
2010	4.16	47.98	5.3	114
2011	3.4	49.03	5.17	116
2012	4.11	50.51	4.89	117
2013	3.8	51.31	4.91	119
2014	4.02	51.78	4.81	120
2015	2.72	52.73	4.31	122

Continued

2016	2.82	53.5	3.86	123
2017	6.04	54.09	3.42	125
2018	4.89	55.19	3.28	126
2019	3.63	56.59	3.48	128
2020	3.39	53.08	4.45	129

Source: The World Bank <https://databank.worldbank.org/> (2021). Source: IMF International Financial Statistics (IFS); National Income of China, the Directorate General of Budget, Accounting and Statistics, Executive Yuan; Economic and Social Research Institute, Economic Planning Agency, Japan <http://investtaiwan.org/> (2021), Labor force in millions, Population in millions.

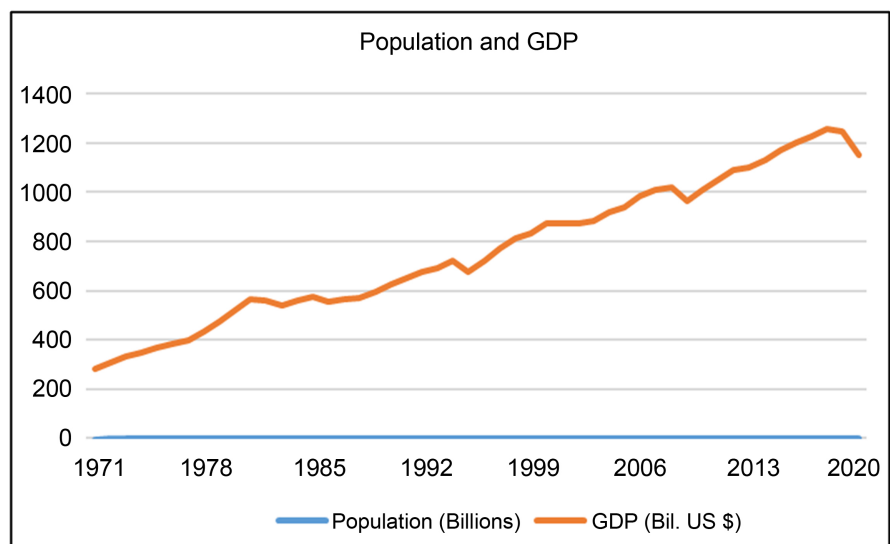


Figure 1. Population and GDP.

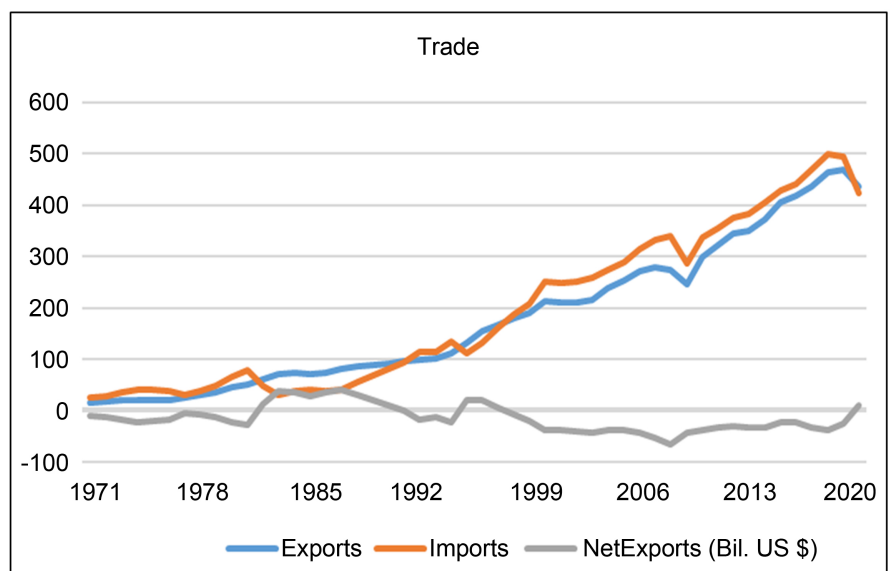
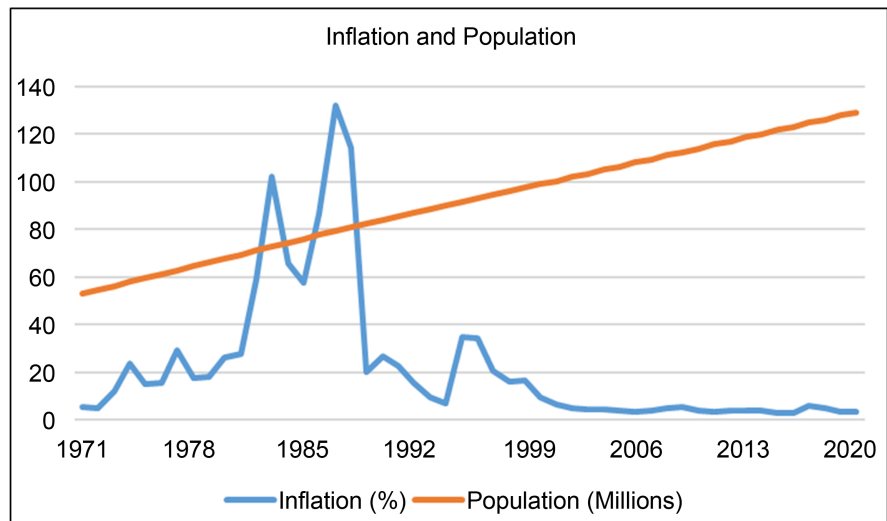
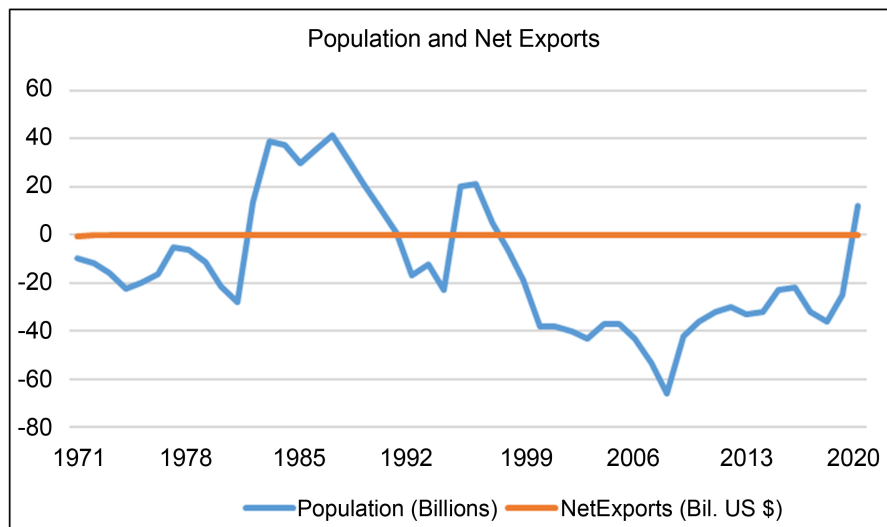


Figure 2. Total trade of Mexico.



**Figure 3.** Inflation and population.



**Figure 4.** Population and net exports.

was mentioned earlier, population had a small but steady growth over the years. On the other hand inflation has been very volatile, especially between 1980 and 1988. After that it showed steady decline and finally in more manageable levels.

**Figure 4** shows the relationship between net exports and population. Obviously net exports very unstable but as we can see in the regression, the population growth impacted net exports in a negative way.

**Figure 5** shows the relationship between GDP per capita and inflation. Research shows that the per capita GDP impacted inflation but not very much, considering the increase in the GDP.

**Figure 6** shows the industrial output growth rate. It is obvious from this graph that the growth of the industrial output has hurt the Mexican economy, since during the last 50 years a number of years had negative growth. Overall the industrial growth has been very unstable.



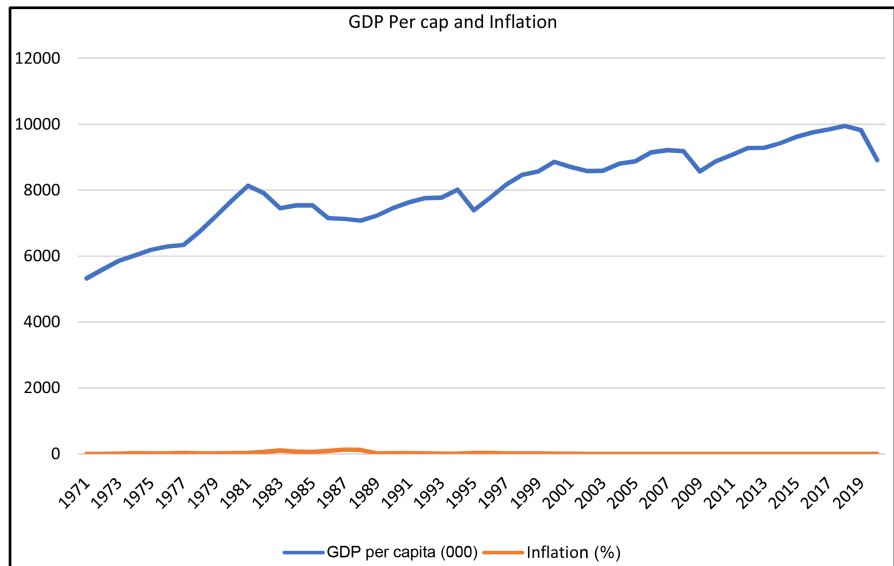


Figure 5. GDP per capita and inflation.

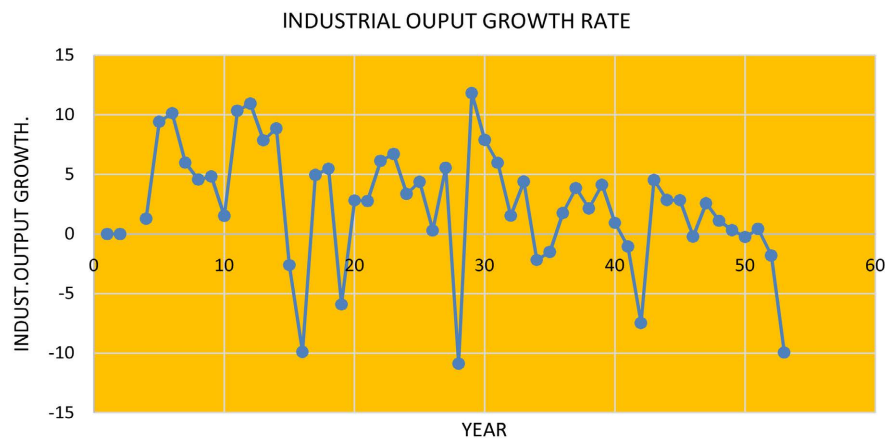


Figure 6. Industrial output growth rate.

#### 4. Conclusions

Finally, in concluding the paper, the authors would like to evaluate the data presented, and possibly derive conclusions about whether NAFTA helped or hurt Mexico.

Looking at and evaluating the data presented, we break it down into 2 periods. One from 1971 to 1993, 22 years, obviously prior to NAFTA; the second period covers the years 1994 to 2020, 28 years after NAFTA. Comparing these two periods, we did not find any drastic changes in the economy of Mexico after 1994, positive or negative. It seems that the Mexican economy continued at almost the same rate as before its recovery and development. Having said that though, we also need to say that 2 areas showed a slight improvement, although at this point it is not clear if they had any impact on the economy. These two areas are the inflation rates, and the net trade with the U.S. With respect to inflation, shown in **Table 2**, we can see that prior to 1994, Mexico had rates in triple digits, and as

high as 131% during 1987. After 1994, however, we see a steady decline to single digits and as low as 2.82% during 2016. At this point, there is no indication that this trend will change.

In conclusion, as we stated earlier at this point, we cannot say with any degree of certainty that NAFTA helped or hurt.

## Conflicts of Interest

The authors declare no conflicts of interest.

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