

Possible Causes of Financial Crises in Emerging Economies: An Empirical Study of Argentina

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Abstract

Financial crises are a global phenomenon, usually associated with significant and persistent declines in economic output, investment, and productivity. The recurring nature of financial crises with the uniqueness of each event makes policy making more complex. In all these traumatic events, macroeconomic fundamentals were severely affected due to institutional and structural weaknesses. In the early 1990s, the world witnessed a series of financial and economic crises mainly affecting the economies of emerging countries, In particular Argentina.

We conducted a standard study using the Auto-Regressive Distributed Lag model for a set of possible macro indicators explaining the 2001 Argentina crisis and its impact on economic growth, based on annual data covering the period from 1980 to 2009. The results indicate that there is a short-term relationship between the variables of the study, we also found a negative impact of all the explanatory variables on economic growth, and this proves the validity of the study.

Keywords: Financial Crises, Economic Growth, Argentina, ARDL Model.

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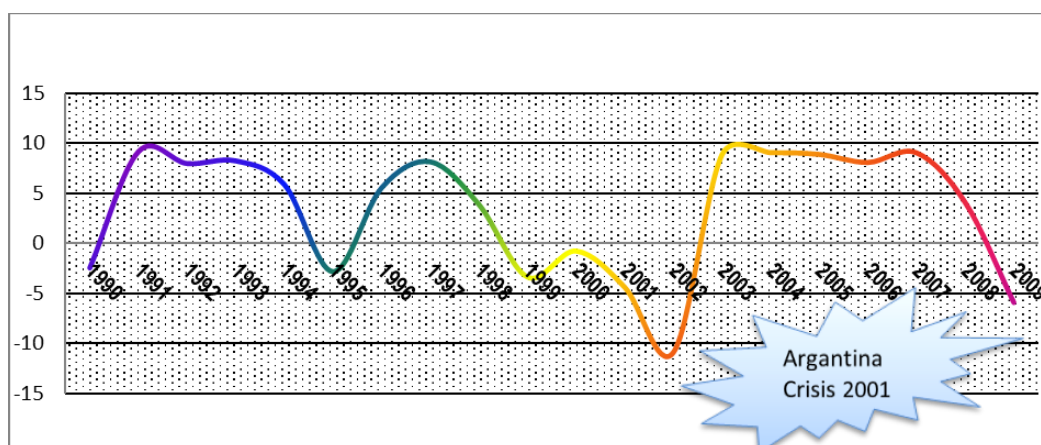
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1-Introduction:

Financial crises are a global phenomenon, usually associated with large and persistent declines in economic output, investment, and productivity. The recurring nature of financial crises with the uniqueness of each event makes policy-making more complex. In all of these traumatic events, macroeconomic fundamentals have been severely affected by institutional and structural weakness. In the early 1990s, the world experienced a series of financial and economic crises that mainly affects the economies of emerging countries. (Allen, F., Babus, A., & Carletti, E., 2009)

He hailed Argentina as one of the most prosperous countries in southern Latin America until the onset of the crisis in the late 1990s. Between 1992 and 2002 Argentina experienced very rapid rates of economic growth followed by an almost total economic collapse. The growth rate in Argentina reached 8% until 1997, but after 1997 its growth rate decreased and became negative to -9.9% in 2000. In contrast, most other Latin American countries in the region were more stable.

Fig.1.: Evolution of the growth rate in Argentina from 1990 to 2009.



Source: The authors based on World Bank data. Available at <https://data.worldbank.org/> . (Accessed 14 June 2023).

However, in 2001, as a result of several causes related to the macroeconomics such as the fixed exchange rate system, the high proportion of foreign debt as well as the external debt service, etc., the Argentine economy in addition to the peg of the hard currency in Argentina to the US dollar and the extensive foreign borrowing left The country is unable to deal with a number of economic shocks. This eventually led to a severe crisis.

This crisis has been the focus of extensive investigations and analyses, which do not yet provide any idea of how it erupted and how it came to be.

The issue of financial crises is one of the most important economic topics that have captured the thoughts of economists and readers, as evidenced by the many studies that have dealt with it. (Belhia, Y., & Tchiko, P. F. ., 2022) However, the research on the primary factors that contributed to the outbreak of these financial and economic crises in emerging countries is still not sufficient

to understand all its aspects. This calls for research on an important issue, an important issue, what are the main reasons that contributed to the exacerbation of the Argentine financial crisis 2001/2002.

The main goal of our research investigation, Which revolves around researching the basic factors that explain the financial crisis that affected a Latin American country in 2001, and thus analyzing the relationships between GDP growth and the important independent variables that explain crises in emerging countries, specifically Argentina. The study covers the period from 1980 to 2009. We used econometric modeling to investigate the significance of the relationships among the variables of interest. The contribution of this paper to the financial literature is to identify the possible negative repercussions of the factors that explain the financial crisis that affected the Argentine economy in 2001 on economic growth.

The remaining sections of the paper are as follows: Section II summarizes the literature review; Section III presents the empirical application, and summarizes the main findings, while Section IV provides the conclusion of the study and recommendations.

2. Theoretical Foundations

The 2001 Argentina crisis

The Argentine crisis of 2001 is known as the last crisis in emerging economies. It distinguished itself as more violent and lasted endlessly. (Nataraj, G., & Sahoo, P., 2003) It is the great economic and social crisis, which took place in Argentina between 1998-2002. The Argentine crisis of 2001 is due to economic mismanagement that forces the government to adopt monetary control policies in the context of the currency board and the inability to afford sovereign debt. (Ari, A., & Dagtekin, R., 2007). The case of Argentina remains an example of countries that particularly illustrate the flaws and contradictions of the "Washington Consensus". This Washington Consensus was a way to infer state intervention and privilege the competitive functions of the market. However, Argentina was a model student if we judge by these criteria. This country has indeed massively privatized. He reduced the number of his civil servants. Its fiscal policy has been as orthodox as state-provincial relations would allow. However, its economic situation became dramatic from the end of the 1990s. (M., Le Page J., 2003)

Average GDP growth was 8% between 1990 and 1994. Between 1992 and 1998, capital inflows were abundant, reaching 5% of GDP on average. But the Currency Board system can produce the opposite effects. If the economy initially loses, for one reason or another, a little competitiveness, foreign exchange inflows become scarce, monetary creation is dried up and the economy enters a crisis of illiquidity.

From 1996-1997, the country's real exchange rate continued to increase. As a result, the current balance became in deficit by more than 4% of GDP, except in 2000 when the current account deficit was -3.2% of GDP. In addition, the appreciation of the dollar to which the Argentine peso

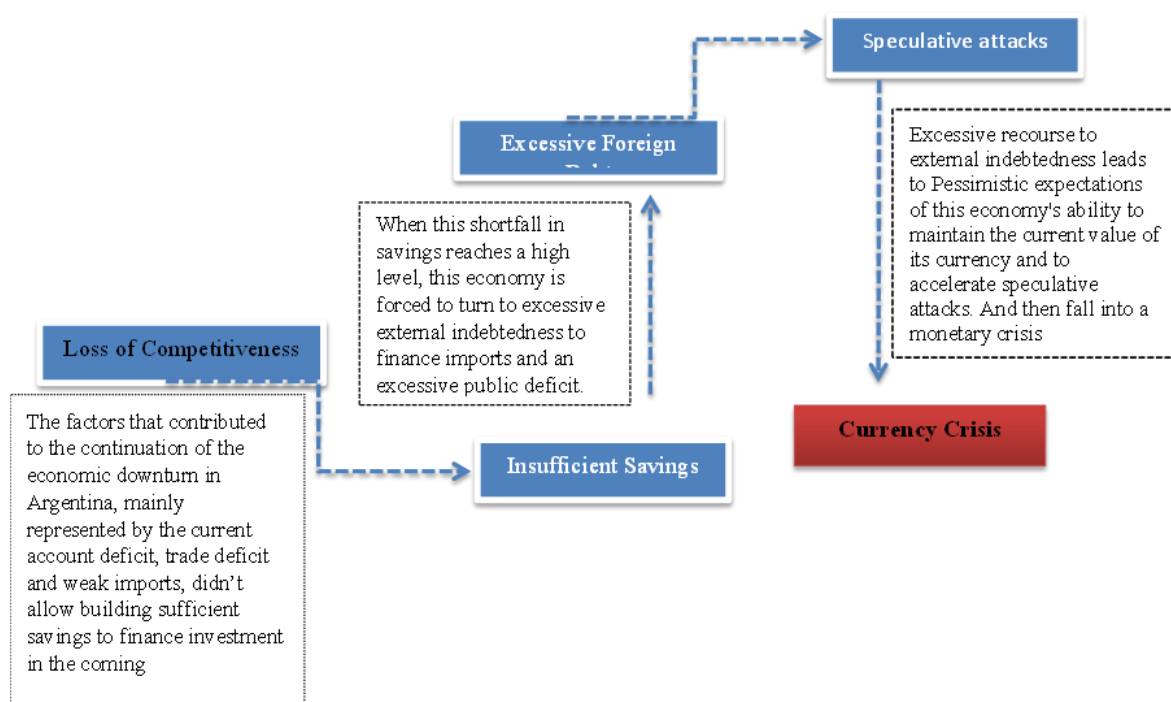
was linked, the devaluation of the Brazilian real and the fall in the prices of cereal products, which occupy an essential place in exports, caused a recession from 1999.

Maintaining the Currency Board system after the depreciation of the Brazilian real was suicidal for the competitiveness of Argentina. This is clearly the primary cause of the crisis. However, it must be recognized that the decision to devalue was made difficult by the fact that 80% of the debts and financial assets were in dollars. In such a context, the drop against the dollar implied a considerable increase in the debt burden.

The second crisis factor was the deficit, which reached a record level during that year. The deterioration of public finances had become severe since 1994 due to tax evasion (estimated at around 23 billion per year), government waste and low tax rates. In the year 2000, the State's financing requirement was 17.5 billion dollars. To finance its deficit, the government had to borrow more and more massively, because Argentina had privatized a lot in the early 90s. Foreign groups thus controlled public services, 90% of banks and 40% of industry. (M., Le Page J., 2003).

In December 2001, after two years of stagnation and increasingly desperate attempts to avert a debt crisis through IMF financial support, fiscal adjustment and debt management operations, Argentina defaulted on its external debt. A few days later on January 2, 2002, it suspended its "convertibility system" which is a legal obligation, backed by hard currency, to exchange Argentine pesos for US dollars. The peso subsequently depreciated by about 200%, and GDP declined by about 11%, before beginning a sustained recovery starting in 2003. (Zettelmeyer, 2018)

Fig.2. The steps that explain the Argentina crisis 2001.



Source: Estimated by Author's.

3. Empirical Framework Of The Study

MODEL, METHODS, AND DATA

The main objective of this study is to identify and analyze the impact of macroeconomic indicators, that is, the main factors of the recurrence of these crises on economic growth in emerging economies, specifically Argentina. In the current study, we use annual time series data ranging from 1980 to 2009 in Argentina. The period under consideration is dictated by data availability. The variables utilized in the current study are summarized in Table 1 .

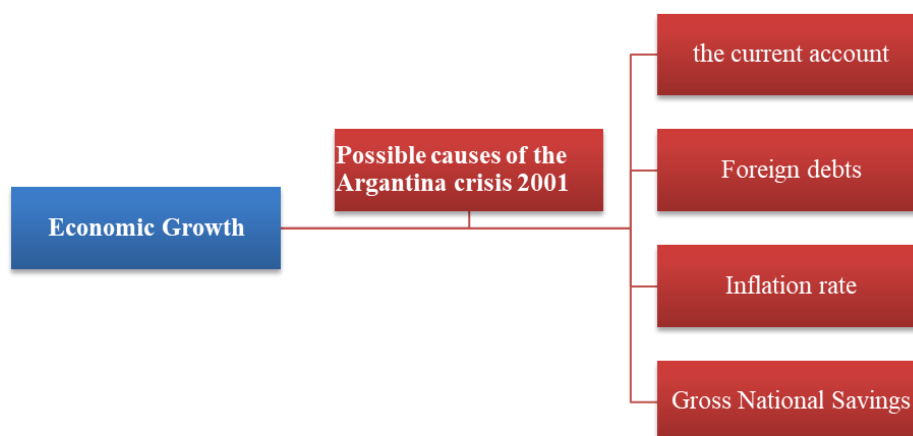
We obtained the data for these variables from the World Development Indicator (WDI) (World, 2023).

Tab.1. summary of variables used in the study.

Variable	symbol	Data source	Measurement
Economic Growth	GDP	Word Development Indicators	(ANNUAL %)
The current account	CA	Word Development Indicators	(% of GDP)
Foreign debts	FD	Word Development Indicators	(% of GDP)
Gross national savings	GNS	Word Development Indicators	(% of GDP)
Inflation	INF	Word Development Indicators	(% of GDP)

■ The Model Analysais

The figure below shows the impact of the macro indicators that caused the Mexican crisis on economic growth:



Based on classical and neoclassical, as well as prior empirical investigations and research (Kouki, M., Belhadj, R., & Chikhaoui, M., 2017) in the simulation of financial crises and economic growth, as well as the investigation of (Ben Abdallah, M., & Diallo, K., 2004), (Yamina BELHIA, Faouzi TCHIKO., 2019) The model specified in equation 1 is used to express the relationship between variables:

$$GDP = f(CA, FD, GNS, INF) \dots\dots\dots(1)$$

The mathematical representation of an ARDL regression model is:

$$RGDP_{(t)} = \beta_{(0i)} + \beta_{(1)} CA_{(it)} + \beta_{(2)} FD_{(it)} + \beta_{(3)} GNS_{(it)} + \beta_{(4)} INF_{it} + \mu_{(t)} \dots\dots\dots(2)$$

Where:

$\beta_{(0)}$ Represent the intercept of the function or we can say the constant, and μ is a random (disturbance) term. Then $\beta_1; \beta_2; \beta_3; \beta_4$ are parameters to be estimated.

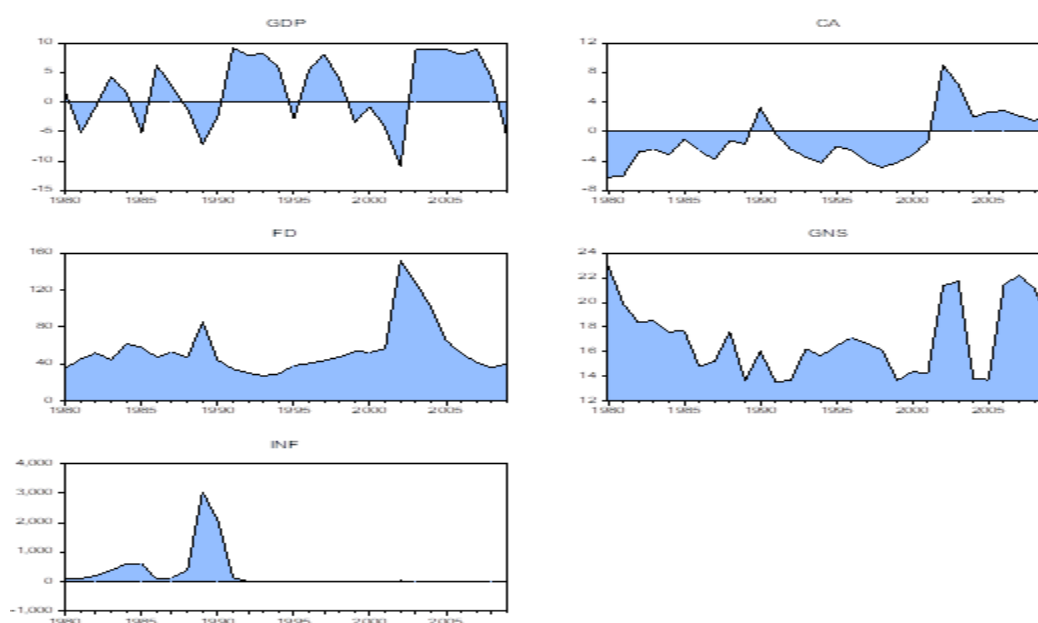
1.1. Analysis of Key Statistical Indicators of Central Tendency and Variation

a) Pre-estimation Analysis

Before estimation, the graphs of the time series under study are plotted, descriptive statistics are displayed, unit root test for the variables are performed, and co-integration analysis is done on the variables. The figures below show the line graphs of the historical performance of the variables used in this study.

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Fig.3. The Variables used in This Work.



a) Descriptive Analysis of Variables

In the following, we present the descriptive statistics of our data by estimating the central tendency of the distribution via the mean and the median values for the variables of interest:

The Table below indicates the mean, median and standard deviation of the variables for the period 1980-2009.

Tab. 2. Descriptive Statistics.

	<i>GDP</i>	<i>CA</i>	<i>FD</i>	<i>GNS</i>	<i>INF</i>
<i>Mean</i>	2.088619	-1.062641	54.84851	17.12652	266.5588
<i>Median</i>	3.277524	-2.163119	47.04743	16.58796	17.21767
<i>Maximum</i>	9.133111	8.970785	151.7746	22.98843	3046.091
<i>Minimum</i>	-10.89448	-6.203067	27.32150	13.56186	-3.561096
<i>Std. Dev.</i>	5.882628	3.566031	28.02901	2.936352	659.2039

b)

Analysis of Correlation

In the following, we present Analysis of Correlation of the variables for two models over the period 1980-2009.

Tab. 3. Correlation matrix for the variables of interest

Correlation	<i>GDP</i>	<i>CA</i>	<i>FD</i>	<i>GNS</i>	<i>INF</i>
<i>GDP</i>	1.000000				
<i>CA</i>	-0.030523	1.000000			
<i>FD</i>	-0.249782	0.663812	1.000000		
<i>GNS</i>	-0.051441	0.299009	0.164680	1.000000	
<i>INF</i>	-0.379291	0.059682	0.124584	-0.197710	1.000000

Source: Produced by the author using the Eviews software.

From the above table, it is clear to us that most of the correlations differ between medium and strong. According to the results of the table, we notice a strong and negative relationship between external debt (FD) and The current account (CA), where the correlation coefficient was estimated

at (-0.776303), while the rest of the variables were estimated. Negative correlation with the gross domestic product (GDP) growth rate.

a) Econometric Models

We used the software EViews version 9.0 to estimate econometric models. Analyses are based on the ARDL method; The autoregressive distributed lag (ARDL) is a technique that allows us to simultaneously estimate the short-run and long run dynamics of our model, even when the time-series are stationary I (0) or integrated of order I (1).

The variables may include a mixture of stationary and non-stationary time-series for ARDL Bounds testing approach proposed by (PESARAN, M. Hashem, 1997), (Pesaran, M. H., Shin, Y., & Smith, R. J, 2001). We employed ARDL model analysis to investigate the relationships between GDP, CA, FD, GNS and INF.

•Empirical Results and discussions

The ARDL results

Before presenting empirical results of the ARDL model, we apply the following econometric steps of the stationary and non-stationary Tests of the time series data by Augmented Dickey-Fuller (1979) (ADF). (Dickey, D.A. & W.A. Fuller, 1979) Test. The Augmented Dickey-Fuller (ADF) test results for the time series variables are presented in Table (4) below.

Table. 4: Unit root test

<i>At Level</i>						
	VAR	<i>GDP</i>	<i>CA</i>	<i>FD</i>	<i>GNS</i>	<i>INF</i>
<i>Model 1</i>	<i>prob.</i>	(0.0072)**	(0.1533) ^{NO}	(0.1368) ^{NO}	(0.0091)*	(0.0134)**
<i>Model 2</i>	<i>prob.</i>	(0.0393)**	(0.2033) ^{NO}	(0.3870) ^{NO}	(0.0307)*	(0.0183)**
<i>Model 3</i>	<i>prob.</i>	(0.0018)**	(0.0143)**	(0.2764) ^{NO}	(0.6975) ^{NO}	(0.0029)***
<i>At First Difference</i>						
<i>Model 1</i>	<i>prob.</i>	-	(0.0001)***	(0.0001)***	(0.0019)***	-
<i>Model 2</i>	<i>prob.</i>	-	(0.0008)***	(0.0008)***	(0.0005)***	-
<i>Model 3</i>	<i>prob.</i>	-	(0.0000)***	(0.0000)***	(0.0001)***	-
Order of integration		I(0)	I(1)	I(1)	I(1)	I(0)

Source: Produced by the author using the Eviews software.

(***) significant at the 1%,(**) significant at the 5%,(*) significant at the 10%.(no) Not significant.

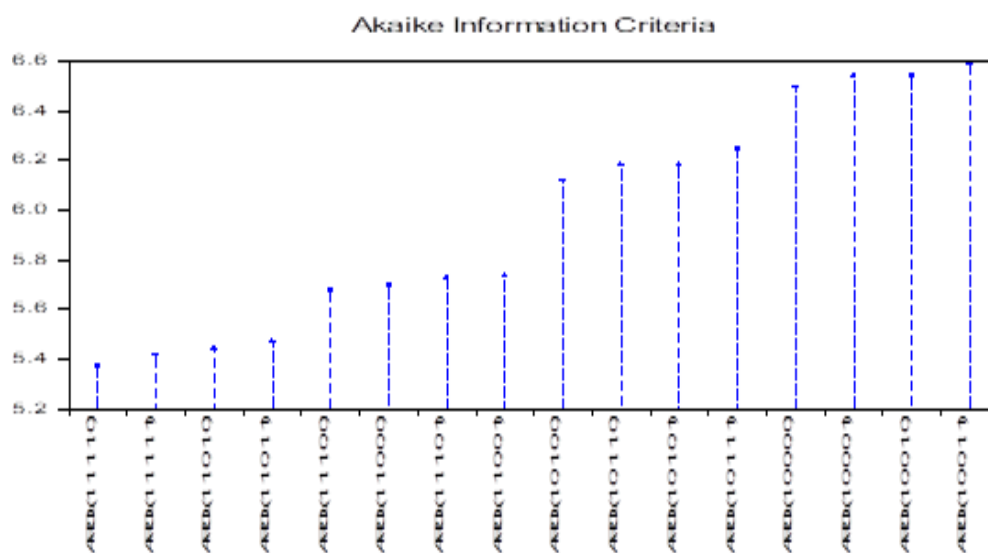
The testing results obtained in Table. 4 suggest that the variables (GDP, INF) is stationary at level, where the probability values of the ADF test indicated that it is less than 5%, and therefore we reject the null hypothesis and accept the alternative hypothesis, which is, both series are devoid of unit root. Form While other variables (CA, FD, GNS), are stationary at first difference in both models.

In order to reach the best results to explain the nature of the relationship between economic growth and the most important determinants of Financial Crisis in Argentina, the ARDL model will be estimated because it combines the stable variables at the level $I(0)$ and the first difference $I(1)$. It is consistent with the nature of the stability of its variables on the one hand moreover, in line with the goal of our study in knowing the nature of the relationship that combines economic growth and the most important determinants of financial crisis in the short or long term, or both.

Test the model's optimum idle intervals

Figure (4) shows the sum of the possible models when changing the degrees of the model variables' slowdowns, By assigning a degree of (1) according to the statistics (Akaike Information Criteria), Thus, it becomes clear that the ARDL (1,1,1,1,0) model is the optimal model and takes the lowest value according to the (AIC) statistic.

Fig. 4. Results of the Optimum Deceleration Intervals Test.



b) ARDL Bounds test estimation results

The ARDL Bounds co-integration test is used to determine the true long-run relationship between the independent variable (financial crisis) and the dependent variable (economic growth (GDP)). The results of the ARDL bounds testing approach (Pesaran, M. H., Shin, Y., & Smith, R. J, 2001) are shown in Table 5.

Tab. 5. ARDL co-integration bound testing approach result.

ARDL Bounds Test	OptimumLag Length	F-statistic
Variables :GDP,CA,FD,GNS,INF	(1, 1, 1, 1, 0)	15.95675
Significance	Critical Value Bounds	
	I0 Bound	I1 Bound
10%	2.45	3.52
5%	2.86	4.01
2.5%	3.25	4.49
1%	3.74	5.06

Source: Author's Computation with E-view 09

The empirical findings lead to the conclusion that, there is relationship between economic growth and the determinants that explain the financial crisis, over the period of the study (1980 to 2009). The value of the calculated F-statistic (15.95675) was found to be higher than the upper bound I(1) critical values at all levels of significance, implying the existence of co-integration. The null hypothesis can be rejected. The next step involved examining the effect of the explanatory variables of financial crisis on economic growth.

a) Short-run relationship: ECM estimates

After estimating the long-run equation, this section estimates the short-run relationship between the variables in our study to calculate the speed of adjustment. To do so, the ECM-ARDL model is estimated. Table 6 reports the results of the short-run relationship.

Tab.6. Short-run relationship ARDL model.

Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(CA)	-1.533010	0.395093	-3.880121	0.0009
D(FD)	-0.059216	0.033921	-1.745737	0.0962
D(GNS)	0.695540	0.332237	2.093505	0.0493
D(INF)	-0.001702	0.000976	-1.744320	0.0965
CointEq(-1)	-0.972642	0.123224	-7.893262	0.0000

$$\text{Cointeq} = \text{GDP} - (0.2868 \cdot \text{CA} + 0.0044 \cdot \text{FD} - 0.1574 \cdot \text{GNS} - 0.0018 \cdot \text{INF} + 5.9379)$$

Source: author's work based on the Outcome of E-views version.09

The results of the estimation in the short term, confirm that there is a common correlation between the variables of the study in the long- run, because the error correction coefficient, which measures, the speed of return to equilibrium is negative and statistically significant. The error correction coefficient (CointEq (-1) = -0.972642) and therefore it is statistically significant at 5%. Where the differences, turmoil and shocks in the country of Argentina will be corrected at a speed of 97.2642% in the coming period.

The results of our estimation confirm that there is a statistically significant negative relationship between the current account and GDP growth in Argentina, such that an excessive current account deficit of 1% leads to a lower level of economic growth by -1.190%. This is consistent with economic theory.

The study proved the existence of a strong negative relationship with statistical significance between the Gross national savings rate and GDP growth. Thus, it was found that the exaggeration and decrease in the Gross national savings by 1% in Argentina results in a decrease in the size of the GDP by 0.695540 % and thus a decline in economic growth. From 1991 to 2001, the cumulative deficit of the current balance revealed insufficient savings to finance investment at very high rates. The drop in the savings rate is due to the increase in the public deficit. But the low level of private savings also plays a role in this problem.

The study also proved that the external debt index is significant and its sign is negative at the level of 1%, which means an increase in the value of external debt by 1%, which will lead to a decrease in economic growth expressed in terms of GDP by -0.059216%. This is explained by the data. Prior to the crisis, the external debt accounted for 50% of the GDP. With a share of 76% in foreign exchange, the debt automatically increases with reductions. The result of this study is consistent with many studies and researches such as those conducted by (Gövdeli, 2019), as well as with the empirical study of (Calderón, C., & Fuentes, J. R., 2013), whose study focused on Latin American countries and showed the negative impact of external debt on economic growth for the period from 1970 to 2010. Moreover, the Works of (Guei, 2019), which emphasized the negative impact of external debt on economic growth in a group of emerging countries.

There is a negative and insignificant effect of the rate of inflation on economic growth, whenever the rate of inflation rises by 1% will lead to a decrease in economic growth by -0.001702% and this result is consistent with economic theory. The estimation result is also consistent with the empirical study of (Erbaykal, E., & Okuyan, H. A., 2008), (Faria, J. R., & Carneiro, F. G., 2001) However, the results indicate that the inflation rate before the crisis does not reflect the potential impact of this phenomenon on the outbreak of the Argentine crisis. Prices are not high enough for inflation to be the cause of the crisis. Even after the crisis, the phenomenon does not seem to be disturbing. Thus, the inflation in Argentina, during the crisis of 2001, did not appear before the crisis and cannot be considered as the possible cause of this crisis.

c) Long-run relationship: ARDL estimates

Since there exists cointegration between variables, we can estimate long-run relationships. The long-term equation is estimated, as reported in Table 7.

Tab .7. Long-run relationship: ARDL estimates.

<i>Long Run Coefficients</i>				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
CA	0.286820	0.308553	0.929564	0.3637
FD	0.004445	0.038853	0.114397	0.9101
GNS	-0.157373	0.274801	-0.572682	0.5732
INF	-0.001750	0.000975	-1.794915	0.0878
C	5.937880	5.571380	1.065783	0.2992

Source: author's work based on the Outcome of E-views version.09

The table above indicates the results of the long-term estimation, as it shows us a Fisher probability of 0.000, which indicates the presence of quality in the model and the ability of the independent variables to explain the dependent variable, which expresses economic growth at 0.804226. However, the probability of all variables is higher than 5%. This indicates that there is no effect of the financial crisis on the GDP in the long- run. I had this effect for a while and soon this risk is addressed.

Robustness checks of ARDL results: diagnostic tests

A. Diagnostics tests

In order to check for the estimated ARDL models, the significance of the variables and other diagnostic tests such as serial correlation, functional form, heteroscedasticity and normality of the model. The results of the diagnostic test shows in Table (8), that there is no evidence of autocorrelation, and the model pass the normality and the test proved that the error is normally distributed. The adjusted R bar shows that around 72.59 % of the variation in GDP is explained by the regressors in both models.

Tab.8. Diagnostics tests

Heteroskedasticity Test: Breusch-Pagan-Godfrey	Inference
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F-statistic	1.232093	Prob. F(19,7)	0.3313	No heteroskedasticity
Obs*R-squared	9.573905	Prob. Chi-Square(19)	0.2962	
Scaled explained SS	2.843358	Prob. Chi-Square(19)	0.9438	
Heteroskedasticity Test : Glejser				
F-statistic	1.199546	Prob. F(19,7)	0.3480	
Obs*R-squared	9.403001	Prob. Chi-Square(19)	0.3094	
Scaled explained SS	4.758808	Prob. Chi-Square(19)	0.7830	
Heteroskedasticity Test : ARCH				
F-statistic	0.159555	Prob. F(1,24)	0.6928	
Obs*R-squared	0.170780	Prob. Chi-Square(1)	0.6794	
Test of Normality				The residuals have a standard distribution
Jarque-Bera	1,127040	Probability	0,569202	
Breusch-Godfrey Serial Correlation LM Test				
F-statistic	0.780530	Prob. F(2,18)	0.4731	No autocorrélation
Obs*R-squared	2.314330	Prob.Chi-Square(2)	0.3144	

Source: Produced by the author using the Eviews software.

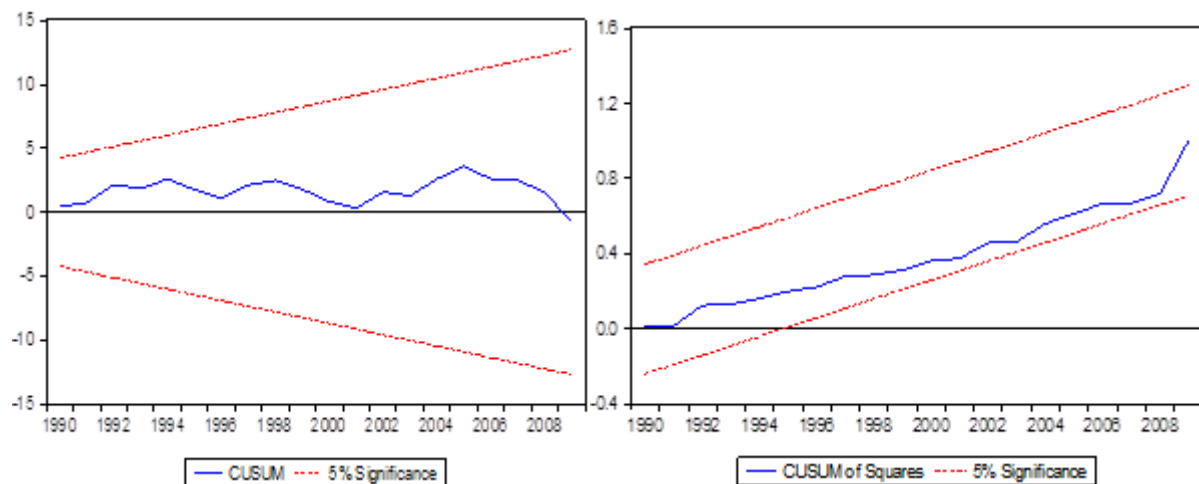
➤ Structural stability test results for the estimated ARDL model

Finally, to ensure the robustness of the specified models along with both short-run and long run coefficients, the study used a cumulative sum (CUSUM) and cumulative sum squares (CUSUMSQ) tests proposed by [\(Brown , Robert L ,Durbin,James,& EVANS ,James M, 1975\)](#)

To achieve this, the structural stability of the estimated parameters in the UECM format of the ARDL model is achieved if the graph of the statistics of both CUSUM and CUSUMSQ falls within the critical limits at a significant level 5 %. The stability tests based on the Cumulative Sum of Recursive Residuals (CUSUM) and the Cumulative Sum of Squares of Recursive Residuals (CUSUMSQ), reported in Fig. 5, observe that at the 5% level of significance all the specified

models are stable and have test lines that fall within the boundary. It implies model robustness along with the stability of both long run and short run coefficient acceptability over the sample period of 1980–2008.

Fig. 5. Plot of CUSUM and CUSUMSQ (Stability Test).



Source: Produced by the author using the Eviews software.

•Discussion:

To summarize this analysis, Table 06 shows the elements of the analysis that can explain the cause of the outbreak of crises in emerging countries, specifically in Argentina for the year 2001.

Table 06: Possible causes of the 2001 Argentina crisis.

<i>Explanatory indicators of the 2001 financial crisis</i>		Loss of competitiveness	Inflation	Excessive foreign debt	Insufficient savings
indicators	Current Account				
	Trade balance				
	Foreign debt				
	Inflation				
	National Saving				

Source: author's work.

- a) The first problem relates to the loss of competitiveness. This economy suffers from this problem because its goods and services are not competitive enough and it therefore does not manage to generate sufficient savings.
- b) The second problem is Excessive foreign debt: The country also suffered from very high foreign debts, which reached successively before the crisis: 53.58% in 1999 and 52.80% in 2000 as a percentage of the GDP. During the Argentine crisis, 151.77% of GDP was recorded in 2002. This indebtedness is excessive.
- c) The last problem is insufficient savings: She suffers from this problem because it is unable to generate a surplus from its commercial relationship with the outside world. The loss of competitiveness and the low level of investment is the logical cause of this lack of savings. Also, the State is unable to release public savings because it multiplies the interventions. This explains, therefore, why it borrows excessively to deal with these cumulative problems.
- d) Inflation does not appear before the crisis, but it appears after the devaluation of the currency as a result of the effects of the crisis.

Conclusion

This paper empirically tests the validity of the role played by macroeconomic indicators, i.e. the main factors of the recurrence of the crisis in the deterioration of economic growth during the 2001 financial crisis were made in an emerging country (Argentina) covering the period 1980-2009. In this study, an ARDL Model was used to find out the effect of remittances on economic growth.

The study concluded that there is a negative and significant impact of the current account balance and external debt on economic growth, and the results showed that there is a negative impact of inflation on the Argentine economy in that period.

The study also concluded that the long-term negative impact of total national savings on economic growth, and this result is consistent with theoretical and practical studies that discussed the reasons that reflect the potential impact of macroeconomic indicators, act as triggers for these crises.

Based on these estimates, we have concluded that the loss of competitiveness, excessive external indebtedness, and insufficient savings are elements that must be taken into account to explain the causes of the outbreak of the Argentine crisis. Through this study, our aim is to bridge the gap in the literature by providing a unified framework for the empirical and theoretical evaluation of the possible causes of emerging countries crises, specifically in the macroeconomic indicators explaining the Argentine crisis of 2001 and its impact on economic growth.

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