

COPING WITH THE EXCEPTIONAL ECONOMIC PROBLEMS IN TURKEY: A FIELD SURVEY ON SMES

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ABSTRACT

Developing countries need higher economic growth to reach the level of developed countries. When developing countries exceed the potential economic growth, problems, such as, high external debt and high current deficit emerge. Such situations increase the financial risk of the country; in addition, international political risks, fluctuations in capital inflows and some manipulative movements have subjected countries to extreme exchange rate fluctuations. Purposes of this research: (1) to uncover the impact of high exchange rate volatility on small business activities and (2) to determine whether the level of exposure of the exchange rate shock on business owners varies by age. The methodology of the study involved a survey administered to 390 small and medium-sized enterprises (SMEs). The findings of the study show that after a period of significant exchange rate fluctuations, business activities were negatively affected, sales decreased, and job cuts increased. On the other hand, the exchange rate effect was mostly felt by all business owners of different ages. According to the study, it can be concluded that small enterprises are vulnerable to rising exchange rate volatility. The effect on SMEs with more work experience is not different. In order to alleviate the effects of adverse exchange rate movements, enterprises should be more cautious in their activities. Two suggestions can be made at this point: (i) Governments should follow optimal growth policies and (ii) Small businesses that have an important place in the economy should be made aware of the exchange rate risk and crisis management.

Keywords: Currency volatility, Exchange rate, SMEs, Economic crisis.

JEL Classification: E32, M21, O16.

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1. Introduction

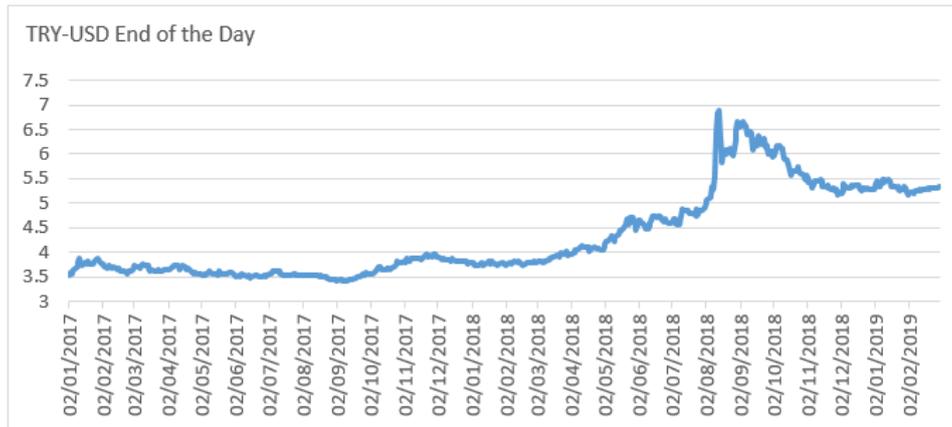
High current account deficit, high external debt and the balance of payments cause important economic problems in many countries. When the problems in some macro variables are combined with social problems, such as, loss of financial trust, the situation becomes more serious. These serious problems sometimes remain at a national level; however, they sometimes become international economic crisis. While the problems that started in Thailand have recently led to the Asian crisis in 1998, US originating problems caused the global financial crisis in 2008. On the contrary, the crisis in Turkey in 1994 and 2000-2001 remained at a domestic level.

That being said, globalization in the last half century developed the international trade. Liberalization of capital movements had a positive impact on economic development in many countries (Schmukler, 2004). In this process economies became more integrated with each other. Along with globalization, countries became more dependent on each other and this led to an increase of the contagion effect. Therefore, the negative effects of this high level of integration among countries has begun to be observed. The experiences indicated that only a few of the developing countries got the advantage from the globalization process (Schmukler, 2004).

While approaching the second quarter of 2018, the increasing external debts of public and private companies in Turkey have been regarded as an important risk. At the end of the first quarter of 2018, the outstanding external debt was 466.74 Billion USD and the rate of Gross Domestic Product (GDP) to outstanding external debt was 52.9 %. It is possible to consider the outstanding external debts as the consequences of the desired high-rate growth. As stated by Toktaş et al., (2019) Turkey needs external debt to increase economic growth because of domestic saving deficiency. Academic studies on Turkey (Toktaş et al., 2019; Gövdeli, 2019), published recently, show that there is causality between debt and economic growth in Turkey. Toktaş et al., 2019 argue that there is a bi-directional causality between debt and economic growth. Gövdeli (2019) revealed that there is long term cointegration between debt and economic growth in Turkey. One of the problems of the Turkish economy is the incomplete structural reforms and the aim of short-term economic growth rather than permanent growth. Under these circumstances, the country's economy was considered as risky by foreign investors, in addition to the international economic and political developments, some regional and international problems and various national macro problems. For that reason, there was a cash outflow overseas. This situation is not officially labelled as a crisis by the Turkish government. But some domestic and foreign economic entities consider it as a crisis. For those and such reasons, an increase and excessive volatility began in currency as of the second half of 2018 in the country (Figure 1).

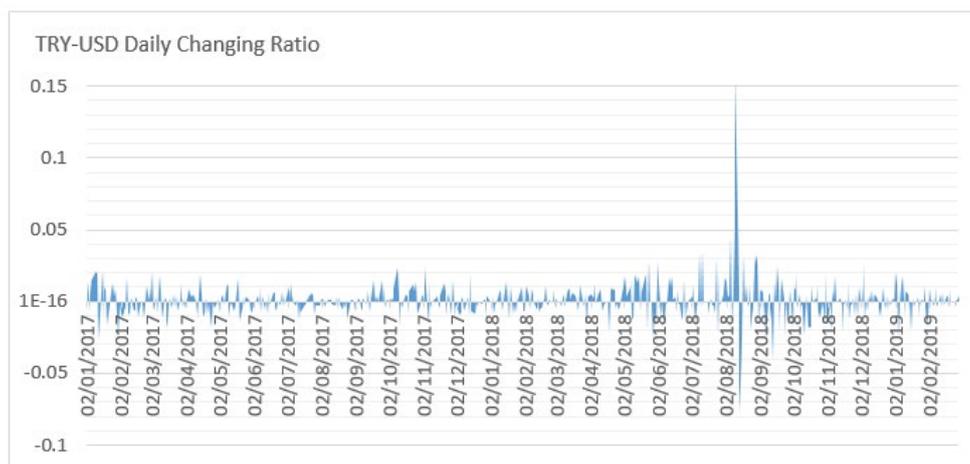
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The Turkish government argued that these currency fluctuations derived from abroad and it is a manipulative attack. While some people supported this idea, others were opposed to it. The increase in currency fluctuation (Figure 2) reached an excessive size, especially in the period following the announcement of the new council of ministers on July 2018. In this period, the dollar rate, which was 3.76 Turkish Lira (TRY) at the beginning of 2018, increased to 7.24 TRY by August 12, 2018 (The increase rate is 92.5 % in this period).



Source: <https://tr.investing.com/currencies/usd-try-historical-data> (Accessed: 10.05.2019).

Figure 1. TRY/USD End of the Day Closing Rate



Source: Calculated by author data from investing.com. <https://tr.investing.com/currencies/usd-try-historical-data>. (Accessed: 10.05.2019).

Figure 2. Daily TRY-USD Changing Ratio

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The currency volatility starting in July 2018 reached extreme levels in mid-August. Figure 2 indicates the daily changing ratio of TRY-USD currency. The highest daily increase in the US Dollar/TRY exchange rate was 15.90% on 10 August 2018. The biggest daily TRY-USD currency decrease happened on August 14th, 2018 with the rate decreasing by 7.69%. According to Figure 2, after the excessive volatility starting in July 2018 reached the highest level in August, it went on in spite of it going down in the 7-month period following this decrease. This volatility prevents enterprises from make forecasts about the future and develop policies accordingly. Therefore, the lack the ability to make predictions. Therefore, SMEs cannot plan their future and take precautions for problematic periods.

Besides daily changes in currency in this period, daylight currency changes also reached significant numbers (Figure 3). The fluctuation between the highest and the lowest daily currency rate reached as high as 1,272 TRY on August 10th, 2018.

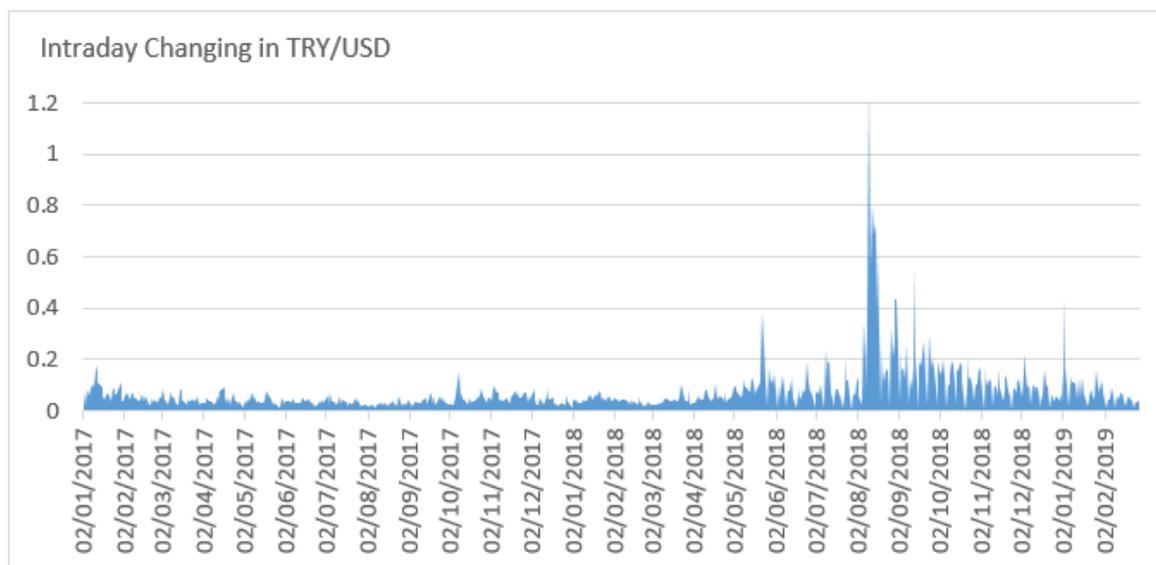


Figure 3. TRY-USD Intraday Changing Lowest and Highest Currency Rate

Source: Calculated by author data from [investing.com](https://tr.investing.com/currencies/usd-try-historical-data). <https://tr.investing.com/currencies/usd-try-historical-data> (Accessed: 10.05.2019).

The excessive volatility and increase in currency led to an increase in production costs in the country, which significantly depends on foreign funds and natural sources in production. According to the International Chamber of Commerce (ICC) (2017), Turkey has a 3.3 open

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market index score¹. This means, Turkey's economy has average economic openness. So, changes in currency are considered an important factor for the Turkish economy. In this period, a trust problem also occurred in the Turkish economy². Even though production costs increased because of economic conditions, businesses could not reflect this in their sale prices. The inflation rate calculated according to Producer Price Index (PPI), which was 12.14% in January 2018, rapidly increased to 45.01% in October 2018. However, the consumer price index (CPI), which was 10.35% in the first month of the year, went up to 25.24% in October 2018 (Figure 4).

On the one hand, an increase in the interest rate (Figure 5) also increased the interest costs of businesses. Figure 5 indicates the interbank 1-year term of ask interest rates. According to Figure 5, the lending interest rate in the interbank market reached its highest level on October 16th, 2018 with 30.54%.

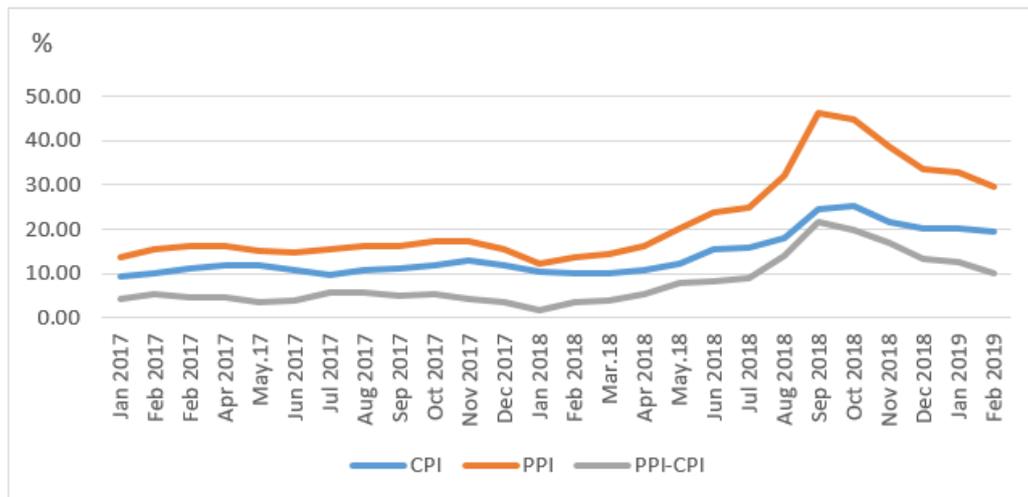


Figure 4. Consumer Price Index and Producer Price Index

Source: Turkish Statistical Institute (TURKSTAT), 2019, <https://biruni.tuik.gov.tr/medas/?kn=84&locale=tr>, (Accessed: 10.05.2019)

¹ The Index calculated by (i) Observed openness to trade, (ii) Trade policy settings, (iii) Foreign direct investment (FDI) openness and (iv) Trade-enabling infrastructure, According to ICC report (2017), scores range from 1 to 6 and compose five groups: Category 1: Most open, excellent (score of 5-6), Category 2: Above average openness (Score 4-4.99), Category 3: Average openness (Score 3-3.99), Category 4: Below average openness (Score 2-2.99) and Category 5: Very weak (Score 1-1.99).

² Economic Confidence Index of Turkey was 105,2 in January 2018 and fall to 75,2 in October 2018. (Turkstat, Economic Confidence Index, July 2019, <http://www.tuik.gov.tr/PreHaberBultenleri.do?id=30947>)

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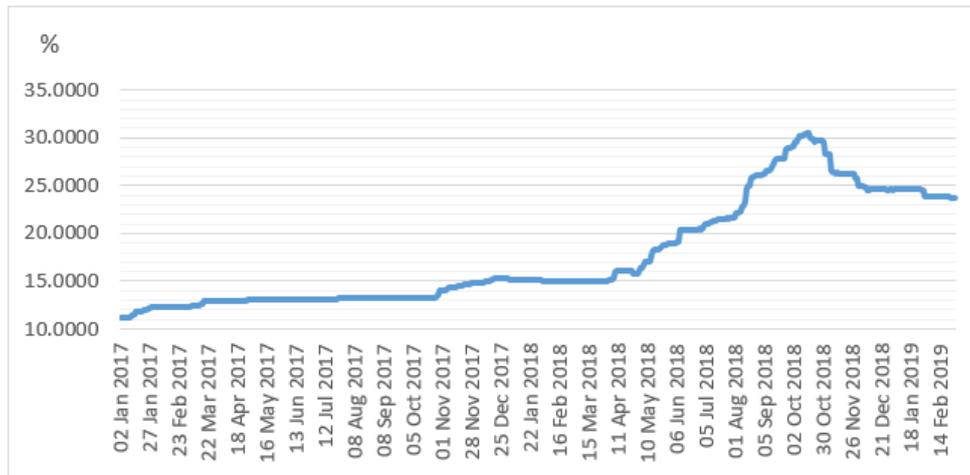
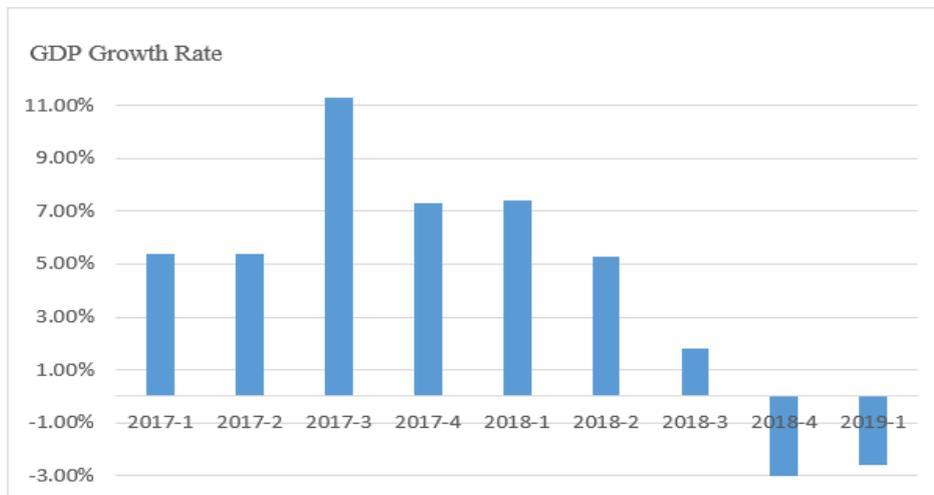
Coping with the exceptional economic problems in Turkey: a field survey on SMEs**Figure 5. Turkish Lira Reference Interest Rate –Ask Rate- (TRLIBOR)**Source: The Banks Association of Turkey, <http://www.trlibor.org/veriler.aspx>, (Accessed: 10.05.2019).

Figure 6 indicates the economic growth rates of the country from the beginning of 2017. The economy, which grew very rapidly (11.30%) in the 3rd quarter of 2017, receded in the 4th quarter of 2018 (-3.00%) and the 1st quarter of 2019 (-2.60%) consecutively.

**Figure 6. GDP Growth Quarterly- Growth Over the Same Quarter of the Previous Year**Source: Turkish Statistical Institute (TurkStat), <http://www.tuik.gov.tr/PreHaberBultenleri.do?id=27825>, (Accessed: 10.05.2019).

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Both currency increase and interest rate increase, as well as, the failure in reflecting costs to sales prices left the businesses in a bad situation. This led businesses to make important decisions: (i) either going on with their activities in the same manner, (ii) or decreasing the volume of activity, (iii) or suspending their activities. In this period, the government tried to assure public opinion, declaring that these developments would end in a short period and that the troubles were temporary and there is no economic crisis. During this period, while the central bank tried to take measures by selling foreign currency and increasing the interest rate, the government tried to transfer resources to the economy using public banks.

2. Literature review

The financial resources of small enterprises are dependent on limited and high interest bank loans. In addition, their technological, administrative and labour skills are low. For that reason, their skills for coping with the economic crisis, and similar cases are poor (Bourletidis & Triantafyllopoulos, 2014). To what extent enterprises are affected from national or international economic problems may vary according to sectors, enterprises or regions (Hodorogel, 2009; Esen & Uyar, 2011; Ayriçay, 2010; Chowdhury, 2011). It was observed that the crisis exposure level of local tourism enterprises in the 2008 global financial crisis period was low (Esen & Uyar, 2011). According to the study, it was determined that the enterprises operating in the sector for a long period were less affected by the crisis. According to Ayriçay (2010), important sectors for the industry, such as, oil and chemistry were less affected by the crisis. As the knowledge level and experience in enterprises increase, the negative effects of the crisis decrease. Portuguese small enterprises were also affected by the global crisis in 2008 (Proença et al. 2014). The studies on 12.857 Small and medium-sized enterprises (SME's) in Portugal indicate that the deterioration in liquidity, the asset structure and profitability of the enterprises were the most important variables that could be used in explaining the capital structures of the enterprises (Proença et al. 2014). Hodorogel (2009) states that the increase in raw material, energy and food prices, currency and inflation in 2008 affected enterprises. The greatest effects of the financial crisis were in trade, construction and real estate sectors. More than 90% of the SMEs in the country felt the effects of the crisis. The expectations in the country changed and more than 83% of the enterprises stated that their profit rates would decrease. More than 90% of them stated that at least 10% of the employees would be discharged. Hodorogel (2009) revealed that more than 80% of Romanian enterprises stated that they cut down on their expenses and more than half of them stated that they would present new products and services to the market. More than half of the enterprises think that the crisis atmosphere would be felt long-term. Emir and Eyüboğlu (2010) emphasized that SMEs in Turkey were affected negatively by the 2008 global crisis.

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Decrease in demand in domestic and foreign markets decreased the capacity usage rates, sale and profitability rates and employment rates and unemployment increased to 16.1%.

Despite significant difficulties, small enterprises may take some precautions in order to cope with problem episodes (Bourletidis & Triantafyllopoulos) (2014). Bourletidis and Triantafyllopoulos (2014) investigated the policies of the enterprises that survived in times of crisis and recovered from this period successfully in Greece. Bourletidis and Triantafyllopoulos (2014) revealed that, as a result of the interviews with 20 enterprise managers, there are 5 significant factors that differentiate these enterprises from other unsuccessful enterprises. These are (i) to restructure the products, (ii) to pay attention to customers with environmental sensitivity, (iii) to set the price which is suitable for customers' conditions, (iv) to reduce the stock supply costs and cash needs by leaving the payments to the suppliers following the sale and (v) to create accurate communication with the parties of the business world. The enterprises that protect their costs and currency positions in crisis periods can also get advantages by paying attention to foreign trade (Çarıkçı et al., 2002).

3. Method and Findings

3.1. Purpose and Method

The purpose of this study is to reveal;

1. whether businesses are prepared against exceptional situations such as crises or not,
2. to what extent businesses are affected by the currency fluctuations,
3. how businesses act in these exceptional situations,
4. how business owners define the current situation,
5. whether these exceptional situations derive from abroad and if there is any manipulation,
6. whether SMEs benefit from these exceptional situations,
7. whether the perceptions of business owners differ according to age,
8. whether there is any correlation between preparing before the crisis and the effect the crisis has on SMEs.

Commercial, manufacturing and service businesses, in Usak city center whose number of employees is less than 10, were selected for this study. Within the scope of this study there are small businesses such as hotels, restaurants and cafes, food and furniture

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manufacturers, supermarkets, transportation companies, building companies, real estate, etc. A survey method based on random sampling was used in this study. The survey was carried out in February 2019, 7 months following a period with excessive currency fluctuations. For the study, a survey was administered to the owners or managers of 390 businesses. The survey consisted of 20 questions with dependent and independent variables. The survey is in the Appendix Table 6. 19 questions were presented in the form of a Likert scale and were coded as “1-Strongly Disagree, 2-Disagree, 3-Neutral, 4-Agree and 5-Strongly Agree”.

It can be assumed that the degree of business experience may have an effect on business owners' perception on the current fluctuation on the Turkish economy and the measures they take. Business owners over the age of 40 witnessed the 2000-2001 economic crisis in Turkey and the 2008-2009 global financial crisis. Therefore, they have an opportunity to compare the current situation with the related downturns. For that reason, the age of business owners was selected as the independent variable of the study.

3.2. Findings

Descriptive statistics about the data obtained from the study are presented in Appendix Table 1. Skewness and Kurtosis values are between the ranges of +2 and -2. Accordingly, it can be said that the scale has a normal distribution (Moors, 1986; Hopkins & Weeks, 1990; Groeneveld & Meeden, 1984; De Carlo, 1997). Cronbach Alpha Coefficient (α) of the scale is 0,711 and this indicates that the internal consistency level is medium.

When we look at the question scores, we can see that while businesses make continuous environmental analysis (3.2692), they are not prepared (2.1154) beforehand for situations such as crises. Businesses state that they have difficulty in paying loans (4.0333) and wages (3.5464) in this period. The activities to try to cheer up the staff (3.2436), are carried out in this period. One of the most frequently applied strategies for businesses in difficult periods is the reduction of expenses. It was noted that the businesses in the sample remarkably reduced their expenses during this period. We can see that businesses failed to change the product (2.3795), they could not find new markets (2.1359), they could not change suppliers (2.5974) and they could not change customers (2.2513) in order to overcome these difficulties. One can note that, it is not possible for the businesses who operate locally to protect themselves in financial crisis periods. Businesses do not hurry to fire personnel (2.8744) in difficult periods because they do not want to have to find new qualified personnel in the following period. The area that businesses are mostly affected in during periods of currency fluctuation is the reduction in sales (4.2667).

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Crisis periods can create new opportunities for some businesses, and they can generate new investments. The businesses in this study could not take advantage from the opportunities for investments (2.3487) and did not sell their assets as a solution for the current problems (2.6282). Businesses did not see the need for reconstruction (2.9897) while evaluating the situation (3.7974).

There is a high tendency in the country to believe that currency fluctuations (3.3923) originate from abroad in a manipulative way. The current situation is mostly defined as a "crisis" (4.077) by the businesses. However, the tendency to think that this situation is temporary (2.9385), is rather weak.

Frequency tables were prepared and presented in Appendix Table 2, in order to determine to what extent businesses were affected by the currency volatility, the measures taken and their perception of the situation. According to Appendix Table 2, 74.4% of the businesses are not prepared for the situations, such as a crisis. The rate of businesses declaring to have made preparations for such situations is 17%. 53.9% of the businesses continuously analyze the environmental conditions. The rate of businesses that can't pay loans and debts regularly is 80.6% and the rate of businesses that have difficulty in paying wages is 64.6%. 52.1% of the businesses carry out activities to cheer up the staff, while 79.7% of the businesses, would like to be affected less by the process and reduce their expenses. The rate of the businesses that did not reduce their expenses is 11.7%.

When we look at Appendix Table 2, we can see that businesses do not have many options to get out of this situation. It is impossible for 68.9% of these businesses with less than 10 employees to change their products. The rate of businesses that could change products is 24.3%. The rate of businesses that manage to change the market is 16.1%. 62.5% of the businesses did not change the suppliers and 67.9% of the businesses interacts with the same costumers, while the rate of businesses that changed their customer portfolio is 20.5%. 43.1% of the businesses fired their personnel because they could not pay their wages. The rate of businesses declaring that their sales reduced is 83.3%. These rates indicate that the effects of currency on small businesses in Uşak City are significantly negative. In spite of these problems, 20.8% of the businesses make new investments. The rate of businesses that downsized by selling their assets is 33.6%. 80% of the businesses define this situation as crisis. Whilst 40.5% of the businesses think that this situation is temporary, 49.3% of the businesses think that it is permanent.

9.5% of the business owners and managers participating in the survey are aged between 18-25 years of age, 45.4 % of them are between 26-40 years of age, 40.8% of them are between 41-60 years of age and 4.4% of them are 61 and over. These demographics can be seen in Appendix Table 3.

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Whether the age of business owners makes any difference on business behavior and whether the level of currency volatility influences businesses or not, will be discussed in the study. For this reason, first of all, the Levene test was carried out for the homogeneity of the variances (Appendix Table 4). Unidirectional ANOVA analysis was carried out in order to determine the differences between the results that are presented in Appendix Table 3. For the variables with non-homogenous variances, Tamhane's T2 test was carried out. Only one hypothesis representing 19 statements was established for 1 independent and 19 dependent variables in the scale.

- H_0 : There is no difference between the levels of the independent variables according to the ages of the business owners.
- H_{1-19} : There is a difference between the levels of the independent variables according to the ages of the business owners.

The findings for the hypothesis can be reviewed as follows:

The age of the business owners makes a difference on only three variables. One of them is the statement "In our business, continuous management process and external environment analyses are carried out" (Environmental Analysis). According to ANOVA test results [$F(3, 386) = 5.440, p = 0.001$], the level of continuous management process and external environmental analysis (Statement: 2) makes a statistically significant difference in terms of age. Descriptive analyses indicate that older business owners do more internal and external analyses.

Another statement that seems to differentiate with age is the statement of "I changed customers in the business within 7 months". A NOVA test results [$F(3, 386) = 3,054, p = 0.028$] indicate that age in currency fluctuation periods makes a statistically significant difference in changing business customers (Statement 10). According to the analysis results, as the age of business owners increases, the level of customer change decreases. Younger business owners are more active in finding new customers in this period.

Another statement which seem to depend on the age is the statement "Adverse fluctuations are deliberate and originated from abroad" [$F(3, 386) = 2,862, p = 0.037$] (Statement: 17). Statistical values indicate when the age of business owners increases, they think that currency volatility and depending adverse effects originated out of Turkey.

Tamhane's T2 test results indicate that variances of the age make no difference on non-homogenous variables. If we disregard these three statements, ANOVA test results reveal that age makes no difference on the behaviors of business owners during the currency

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volatility period and the level of adverse effects on them. So, we see except of 3 hypothesis, we didn't reject H_0 hypothesis.

To see the relation between the preparation of SMEs before the crisis and the level of effect of the crisis, correlation analysis has been applied and the results are shown in Appendix Table 5. According to the correlation analysis, SMEs that have prepared before the crisis, have faced simpler problems than the other SMEs. Appendix Table 5 indicates that the Correlations coefficients for both loan payment problems and decrease of sales are -.213 (p. 0.01) and -.197 (p. 0.01). There seems to be no relation between preparation for the crisis and salary payment problems. Even though the correlations are low, it can be said that the preparations of SMEs before the crisis have had a positive effect on economic problems derived from currency fluctuations.

According to Appendix Table 5, conducting environment analysis before a crisis has a very slight relation with the effect of the currency crisis. There is no relation between conducting environment analysis and loan payment problems. When SMEs do environment analysis, they see low salary payment problems and low decreasing problem in sales. Correlation coefficients between environment analysis on both salary payment problem and decreasing problem in sales are -.108 (p 0.05) and -.113 (p 0.05).

4. Conclusions

This study investigated (i) whether SMEs make preparations before the problematic periods such as a crisis, (ii) the effect of excessive currency volatility on SMEs in the second half of 2018 in Turkey, (iii) how SMEs owners acted towards these events, (iv) how SMEs owners define the current situation and what was the main reason for this situation, (v) what is the origin of this situation, (vi) if the SMEs got any benefit from these exceptional situations, (vii) if the perception of SMEs owners differ according to age, (viii) whether there is any correlation between preparing before the crisis and the crisis effect on SMEs. For this reason, data from 390 SMEs owners in Usak city, Turkey, was collected using a survey.

The findings of the study revealed that (i) SMEs owners did not make preparations before the problematic periods, (ii) currency fluctuation affected the SMEs deeply and in this period sales reduced in most of the SMEs and they had difficulties in paying wages and debts; (iii) It was not possible for SMEs to take measures to avoid negative effects, as during this period, the SMEs were not able to create liquidity by selling assets. This is because the economic problems affected all the economy in the country. Therefore, all

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economic units needed liquidity and therefore there were no buyers; (iv) This event was defined by approximately 80% of the SMEs as a “crisis” in that business owners think that this situation will continue for a while, unlike the opinions of policy makers; (v) Most of the SMEs owners think that this economic problems originated from abroad and there is manipulation of Turkish economy; (vi) the SMEs could not take advantage of the opportunities for investments; (vii) the previous experience of the older SMEs owners or managers, did not make a significant differences between the status of the SMEs against the current currency problem; (viii) When preparations were made before a crisis, these SMEs were affected less than those who did not prepare. So, those SMEs that did not make preparations before the crisis, were affected more harshly than the others.

The findings in literature indicate that enterprises are influenced on different levels in a crisis (Esen & Uyar, 2011; Ayriçay, 2010; (Proença et al. 2014). It can be said that the sectors which are a priority for the country’s economy and the enterprises that manage to differentiate from other enterprises are more durable against these difficult situations. It was observed that the enterprises developing different policies in difficult periods became more successful in these periods (Bourletidis & Triantafyllopoulos, 2014), however, most of the enterprises in this study were affected negatively from these developments.

The difficult circumstances, such as a crisis in any period of the economic life, may not only happen at an enterprise level but they can also be experienced at a local, national or international level. For that reason, SMEs should always have a crisis plan. They must use some currency risk management instruments. This may be possible both by traditional methods, as well as, modern methods such as futures, forwards, options and swaps. It would be beneficial if policy makers would inform the public opinion through training programs so that enterprises and the economic life would not be damaged in times of crisis.

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5. Appendixes

Appendix Table 1. Descriptive Statistics

Statement	N	Minimum	Maximum	Mean	Std. Deviation	Skewness	Kurtosis
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic Std. Error	Statistic Std. Error
1.Preparation	390	1,00	5,00	2,1154	1,15151	,961 ,124	-,010 ,247
2.Enviroment	390	1,00	5,00	3,2692	1,52842	-,274 ,124	-1,462 ,247
3.Loan	390	1,00	5,00	4,0333	1,18101	-1,251 ,124	,549 ,247
4.Salary	390	1,00	5,00	3,5564	1,47146	-,649 ,124	-1,051 ,247
5.Cheer up	390	1,00	5,00	3,2436	1,40497	-,272 ,124	-1,281 ,247
6.Expense	390	1,00	5,00	3,9795	1,04382	-1,199 ,124	1,005 ,247
7.Product change	390	1,00	5,00	2,3795	1,30634	,787 ,124	-,596 ,247
8.Market change	390	1,00	5,00	2,1359	1,08720	1,031 ,124	,328 ,247
9.Supplier change	390	1,00	5,00	2,5974	1,36029	,597 ,124	-,954 ,247
10.Customerchange	390	1,00	5,00	2,2513	1,15549	,664 ,124	-,640 ,247
11.Dismissal staff	390	1,00	5,00	2,8744	1,38375	,034 ,124	-1,390 ,247
12.Decrease sales	390	1,00	5,00	4,2667	1,04435	-1,517 ,124	1,582 ,247
13.Investment	390	1,00	5,00	2,3487	1,24460	,690 ,124	-,566 ,247
14.Assetsales	390	1,00	5,00	2,6282	1,38954	,455 ,124	-1,182 ,247
15.Situation	390	1,00	5,00	3,7974	1,16614	-,841 ,124	-,200 ,247
16.Reconstruction	390	1,00	5,00	2,9897	1,36985	,139 ,124	-1,286 ,247
17.External causes	390	1,00	5,00	3,3923	1,51002	-,479 ,124	-1,231 ,247
18.Crisis	390	1,00	5,00	4,1077	1,24760	-1,387 ,124	,762 ,247
19.Temporary	390	1,00	5,00	2,9385	1,53663	,146 ,124	-1,511 ,247
20.Age	390	1,00	4,00	2,4000	,71990	-,062 ,124	-,314 ,247
Valid N (listwise)	390						

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Nr	Statement	1	2	3	4	5	Total
1	Preparation	138 (35.4%)	152 (39.0%)	34 (8.7%)	49 (12.6%)	17 (4.4%)	100%
2	Environment	75 (19.2%)	73 (18.7%)	32 (8.2%)	92 (23.6%)	118 (30.3%)	100%
3	Loan	21 (5.4%)	42 (10.8%)	13 (3.3%)	141 (36.2%)	173 (44.4%)	100%
4	Salary	62 (15.9%)	49 (12.6%)	27 (6.9%)	114 (29.2%)	138 (35.4%)	100%
5	Cheer up	60 (15.4%)	78 (20.0%)	49 (12.6%)	113 (29.0%)	90 (23.1%)	100%
6	Expense	15 (3.8%)	31 (7.9%)	33 (8.5%)	179 (45.9%)	132 (33.8%)	100%
7	Product change	109 (27.9%)	160 (41.0%)	26 (6.7%)	54 (13.8%)	41 (10.5%)	100%
8	Market change	114 (29.2%)	187 (47.9%)	26 (6.7%)	48 (12.3%)	15 (3.8%)	100%
9	Supplier change	84 (21.5%)	160 (41.0%)	33 (8.5%)	55 (14.1%)	58 (14.9%)	100%
10	Customer change	119 (30.5%)	146 (37.4%)	45 (11.5%)	68 (17.4%)	12 (3.1%)	100%
11	Dismissal staff	83 (21.3%)	101 (25.9%)	38 (9.7%)	118 (30.3%)	50 (12.8%)	100%
12	Decrease sales	11 (2.8%)	27 (6.9%)	27 (6.9%)	107 (27.4%)	218 (55.9%)	100%
13	Investment	116 (29.7%)	133 (34.1%)	60 (15.4%)	51 (13.1%)	30 (7.7%)	100%
14	Asset sales	93 (23.8%)	143 (36.7%)	23 (5.9%)	78 (20.0%)	53 (13.6%)	100%
15	Situation	20 (5.1%)	47 (12.1%)	51 (13.1%)	146 (37.4%)	126 (32.3%)	100%
16	Reconstruction	57 (14.6%)	119 (30.5%)	62 (15.9%)	75 (19.2%)	77 (19.7%)	100%
17	External causes	79 (20.3%)	35 (9.0%)	55 (14.1%)	96 (24.6%)	125 (32.1%)	100%
18	Crisis	30 (7.7%)	28 (7.2%)	20 (5.1%)	104 (26.7%)	208 (53.3%)	100%
19	Temporary	90 (23.1%)	102 (26.2%)	40 (10.3%)	58 (14.9%)	100 (25.6%)	100%

Appendix Table 3. Age of Business Owners

Age	Frequency	Percent	Valid Percent	Cumulative Percent
18-25	37	9,5	9,5	9,5
26-40	177	45,4	45,4	54,9
41-61	159	40,8	40,8	95,6
61 and above	17	4,4	4,4	100,0
Total	390	100,0	100,0	

Appendix Table 4. Test of Homogeneity of Variances and Anova Test

	Levene Statistic	df1	df2	Sig.	F	Sig.
Preparation	2,630	3	386	,050	,985	,400
Environment	1,909	3	386	,128	5,440	,001
Loan	4,287	3	386	,005	1,523	,208
Salary	5,045	3	386	,002	2,401	,067
Cheer up	,111	3	386	,953	,479	,697
Expense	,919	3	386	,431	,990	,397
Product change	,653	3	386	,581	,346	,792

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	Levene Statistic	df1	df2	Sig.	F	Sig.
Market change	,680	3	386	,565	,218	,884
Supplier change	3,629	3	386	,013	2,681	,047
Customer change	1,021	3	386	,383	3,054	,028
Dismissal staff	,093	3	386	,964	1,639	,180
Decrease sales	,668	3	386	,572	,200	,897
Investment	,993	3	386	,396	,649	,584
Asset sales	1,390	3	386	,246	1,451	,228
Situation	1,982	3	386	,116	,219	,883
Reconstruction	,609	3	386	,610	,224	,880
External causes	,274	3	386	,844	2,862	,037
Crisis	1,067	3	386	,363	,995	,395
Temporary	3,177	3	386	,024	,911	,435

Appendix Table 5. Correlation Between Preparation before crisis and Effect on SMEs

		Loan	Salary	Decrease sales
Preparation before Crisis	Pearson Correlation	-,213**	,039	-,197**
	Sig. (2-tailed)	,000	,438	,000
	N	390	390	390
Environment Analysis	Pearson Correlation	-,092	-,108*	-,113*
	Sig. (2-tailed)	,070	,033	,026
	N	390	390	390

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

Appendix Table 6. Questionnaire

	Statements	Short Title
1	Crisis Preparation is carried out in our business.	Preparation to Crisis
2	In our business, continuous analysis of management and external environment is carried out.	Environmental Analysis
3	I had difficulty paying my loans in a 7-month period.	Problem with paying the loan
4	I can't make my daily payments like salary.	Problem with paying salary
5	I'm trying to cheer up the staff.	Cheer up
6	I limited my expenses to be less affected by developments in the last 7 months.	Expense Reduction
7	I made a product change in the last 7 months.	Product change
8	I made a market change in the last 7 months.	Market change
9	In the last 7 months, I made a supplier change.	Supplier change
10	I made a customer change in the last 7 months.	Customer Change

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	Statements	Short Title
11	Dismissal in the last 7 months.	Dismissal
12	Our sales have decreased in the last 7 months.	Sales decrease
13	I invested in order to benefit from the developments.	New investment
14	Due to the developments I sold some assets.	Asset sale
15	During this period, I made the situation analysis of the enterprise.	Situation analysis
16	I went to restructure.	Reconstruction
17	The reason for these developments is manipulative and external.	External causes
18	I call the developments as crisis	Crisis
19	The Problems are temporary.	Temporary
20	Age	Age