POLITICAL CHANGES AND ECONOMIC DEVELOPMENT IN ROMANIA

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ABSTRACT: The process of the real convergence of Romanian economy with the economy of the European countries was strongly influenced by the economic unbalances that had occurred throughout the period 1990-2009. The sustained economic growth was, nevertheless, accompanied by greater budgetary deficits. The size of these unbalances was also accentuated by the fiscal and salary policies wrongly adopted during the electoral years. The current paper aims at studying the correlation between the budget balances and the electoral cycles registered in Romania during 1990-2009.

KEYWORDS: electoral cycle, economic growth, budget balance

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Introduction

The year 1990 has marked for the Central and Eastern European countries major economic, political and social changes. The instauration of the market economy imposed the adoption of measures requiring economic reforms that should ensure the shift from a centralised economy-based system, where the state property was dominant, to a system where the competition and the market economy mechanisms should be functional. The reforms adopted in these countries were complex and needed both the adoption of measures of macroeconomic stabilization and structural reform measures in the economic system.

Among the Central and Eastern European countries, Romania "inherited" in 1990 one of the toughest regimes. The width of institutional and structural changes necessary to be implemented in this country highly exceeded that of the other Eastern countries. The fall of the dictatorship generated, in the first years after the 90s, major political confrontations. The reform measures of the economic system, which triggered significant budgetary restrictions with negative consequences on the electors, could not be put off. The delay of their adoption affected the success of the instauration of the new market economy system.

The thesis of the manipulation of the budgetary policy by the governmental authorities for voting purposes was hugely debated in the USA following the publication of Tibbits' works (1931), and subsequently, of Kramer's (1971), Nordhaus'(1975) and Tufte's (1978). "The Theory of the electoral cycle" as it was called in the literature, sustains that the governmental authorities use macroeconomic policy tools in order to maximize their chances to be re-elected. Therefore, during the first part of a governmental mandate, the main goal would be the fight against inflation while the economic policy would be restrictive and in the second part of the mandate, the priority would fall on the unemployment while the economic policy would become expansionist. The models that describe this phenomenon can be split into two groups: opportunistic models (Nordhaus, 1975) and partisan models (Alesina & Roubini, 1992, Reichenvater, 2007). Although quite widespread, this thesis was subsequently refuted by numerous authors. McCallums' (1978) and Beck's studies (1987) highlight the lack of a correlation between the economic policy and the electoral years as well as the lack of budgetary manipulation (Paldam, 1981, 1989, Lowery, 1985), or at least their limited existence (Nadeau, R., 1990). Later studies, such as those conducted by Drazen (2000) find little evidence of a political business cycle in data on unemployment and GNP growth for some OECD countries. Drazen (2000)

distinguishes between empirical predictions that focus on policy outcomes (inflation, unemployment, growth) and those that focus on policy instruments (taxes, government expenditure interest rates); he finds out that "monetary surprises are an unconvincing driving force for political cycles, either opportunistic or partisan; research should concentrate on fiscal policy as the driving force".

The present paper is part of the context of these debates regarding the economic policy of a country and the electoral cycle. Given the specificity of the Central and Eastern European countries and, especially that of Romania, we will analyze the correlation between the budget balance (% of the GDP) and the electoral cycles, during 1990-2009 for this country.

In this paper we identify the economic disparities between Romania and other European countries, taking into consideration the most important macroeconomic indicators. Due to the high variations of economic indicators registered in 2009, we took into consideration the average level of the main macroeconomic indicators registered in the last three years, respectively during 2007-2009. After highlighting the main economic disparities registered in the European Union countries, we will characterize the macroeconomic situation of Romania by means of the GDP growth variation, of the budget balance, the inflation rate and the unemployment rate during 1990-2009. In the last part of the paper we will estimate an econometric model, in order to identify the influence of electoral cycles on the budget balance, considering as a dependent variable the budget balance registered in Romania during 1990-2009 (% of the GDP).

The data we used include measures from official sources as World Bank, INSSE (The Romanian's Institute of Statistics) and Eurostat. All the results are obtained using the SPSS 16.0 software.

Economic disparities between Romania and the other European Union countries in 2009

The highlighting of economic disparities among EU countries will be conducted taking into consideration, in a first stage, the level of the GDP per capital in Purchasing Power Standards (PPS) registered in the European Union countries in 2009. In the second part, we analyse the average level of the most important economic indicators registered in 2007-2009: *Unemployment rate* (%), *Budget balance* (% of GDP), *Real GDP growth rate* (%), *Inflation rate* (%). These variables reflect the Keynesian "magic square" of the 1950s/1960s which combined full employment, low inflation, external balance and fast growth. By

applying the principal components analysis, we identified the characteristics of the EU countries from the point of view of these indicators and the groups of countries among which there are the greatest economic disparities.

Taking into account the most important macroeconomic indicator namely the level of the GDP per capita in Purchasing Power Standards (PPS) registered in 2009, we defined three groups of countries as follows:

- The 1st group formed of the 15 EU countries existing before the enlargment towards the Central and East European countries. Due to the great differences registered between the value of the GDP per capita in Luxembourg and all the other European Union countries, we subsequently excluded this country from our analysis.
- The 2nd group formed of the countries that adhered to the Eu in 2004 (Cyprus, Estonia, Latvia, Lithuania, Malta, Poland, Czech Republic, Hungary, Slovenia and Slovakia);
- The 3rd group formed of the countries that adhered in 2007 (Bulgaria and Romania).

The graphical representation of the GDP per capita distribution for the countries belonging to the three groups, when using the box-plot diagrams, is made in the figure 1:

Figure 1: The distribution of GDP per capita in PPS in 2009 for the EU countries
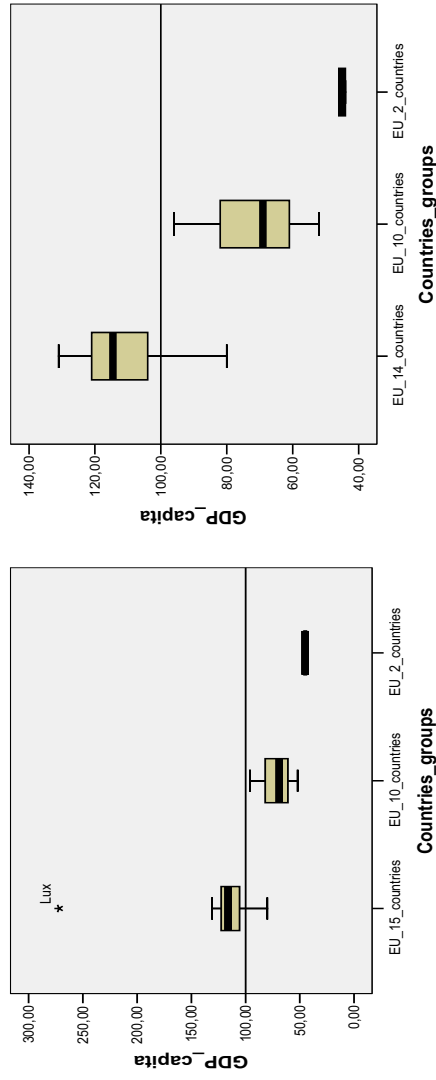
The interpretation of the box-plot diagram is made according to the position of each box-plot in comparison with the average level, represented by the horizontal line, and according to its size. The box-plot position towards the average level, represented by the mean of the 27 European Union countries, highlights the intergoup differences. The size of the box-plots shows the intragroup differences registered among the countries of each group.

The diagrams represented in the above figure highlight important economic differences both among the countries of the three groups and the countries belonging to a certain group.

Thus, it can be noticed that Luxembourg is different from the other EU countries from the point of view of the level of the GDP per capita: in 2009, this country had a GDP of 272% comparing to the average of the 27 EU countries.

As for the intergroup differences, exception being Luxembourg, one can notice in the diagram represented in the right part of Figure 1 that the EU countries had on an average a level of the GDP per capita of 112% above the EU average, in 2009. The countries which adhered to the EU in 2004 registered in 2009 a GDP per capita of 71.7% below the EU average while the countries which adhered in 2007 have a GDP of 45% below the EU average.

As regards the intragroup differences, highlighted by the size of the box-plots, one can notice that the biggest differences are registered among the countries which adhered in 2004 and the countries exisiting before this enlargement. In the case of the EU countries existing before the enlargement towards the Central and East European countries, excepting Luxembourg, the level of the GDP per capita varied in 2009 from 80% below the European average, in the case of Portugal, to 131% above the European average, in the case of the Netherlands. In the case of the 10 countries which adhered in 2004, the most important differences were registered between Latvia and Lithuania, with 52 and 55% below the European average, and Cyprus and Slovenia, with 96% and 88% below the European average.

The box-plot diagrams represented in Figure 1 highlighted important economic disparities among the EU countries. In 2009, the variations of the level of the GDP per capita expressed in PPS varied from 45%, in the case of Bulgaria and Romania, to 272%, in Luxembourg, in comparison with the EU27 average across the Member States.

The identification of economic disparities, taking into account the average level of macroeconomic indicators registered in 2007-2009 (*Unemployment rate, Budget balance*, *Real GDP growth rate*, *Inflation rate*), is made by means of the application of the principal components analysis, one of the most important methods of multivariate statistical analysis. This method of analysis applied in the study of the correlations between numerical variables (Lagarde, 1983), highlights both the correlations among variables and the differences among statistical units (Volle, 1997). The advantage of these methods is the synthetic graphical representation in a system of factorial axes of statistical units and statistical variables. The factorial axes are linear combinations of statistical variables. To each factorial axis is associated a part of the information contained in the initial data table, also named explained variance (Bénzecri, 1992). The factorial axes are classified in a decreasing order according to their discriminatory power: the first factorial axis explains most of the total variance, highlighting thus the greatest differences among the statistical units. The interpretation of results will be conducted, thus, for a reduced number of factorial axes (Everitt, Dunn, 2001), which explain at least 70% of the total variance, according to Bénzecri criteria.

Following the data processing, the representation of the statistical variables and the EU countries is made in the Figure 2:

Figure 2: The graphical representation in the system of the first two factorial axes of the average level of the main economic indicators registered in 2007-2009 in EU countries
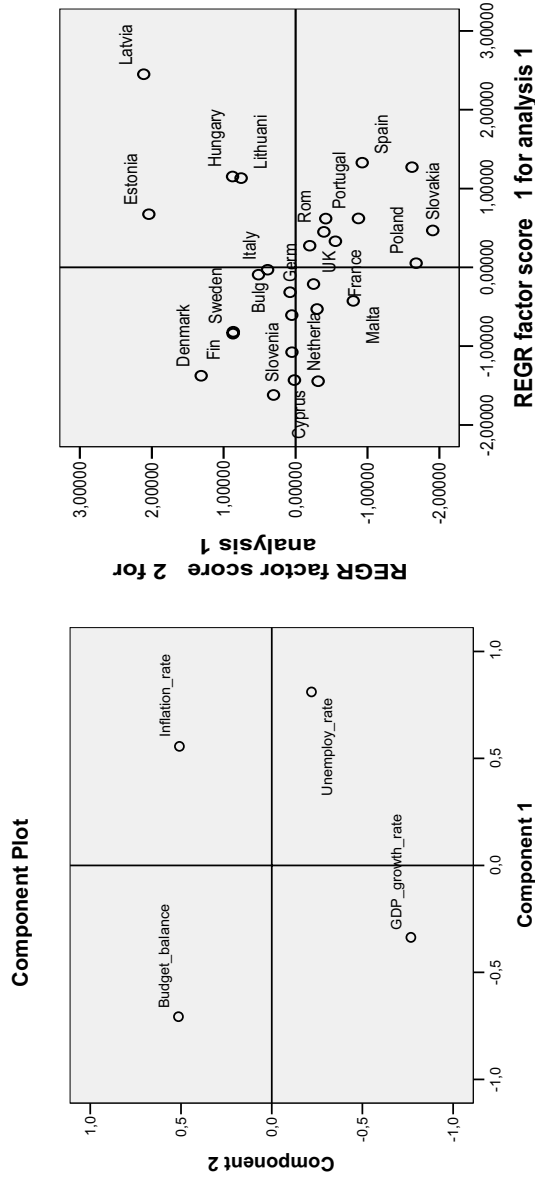
The diagrams presented in the figure above mark important economic disparities among the countries of European Union.

The most important disparities, highlighted by the first factorial axis, horizontally represented, are determined by the *Unemployment rate*, on one hand, and by the *Real Budget Balance*, on the other hand. The diagrams represented in Figure 2 show that Spain and Latvia experienced in the period 2007-2009 the highest unemployment rates (12.53% and 10.2%, the average values registered in these three years) and the lowest *Budget Balance* (-4.47%, respectively -4,73%). The biggest economic disparities registered by the first factorial axis are registered between these countries and Cyprus, the Netherlands and Slovenia where the unemployment rate was reduced and the budgetary deficit was not very important.

The second factorial axis, vertically represented, highlights important disparities among the countries that had to cope with budget balance and significant inflation rates, on the one hand, and the real GDP growth rate, on other hand. Slovakia and Poland were characterized by the most significant real GDP growth rate for the period 2007-2009, and by important deficit of budget balance and reduced inflation rates. Considering the average of the years 2007-2009, Poland and Slovakia were the countries which registered the highest real GDP growth rate: 4.5%, respectively 3.83%.

In the case of Romania, under the circumstances of a more severe economic contraction than in other countries, the inflation rate wasn't significantly reduced, as in other European countries, due to the depreciation of the national currency, to the insufficient adjustment of public sector expenses as well as the rigidity existing on the product market (restrictive regulations for companies as to market penetration and especially the activity liquidation) as well as on the labour market (reduced mobility of workforce, complicated and time-consuming procedures of lay-off, reduced flexibility of the working programme).

Dynamics of macroeconomic indicators in Romania during 1990-2009

The characterization of the macroeconomic situation of Romania is undertaken by means of the GDP growth variation, of the budget balance, the inflation rate and the unemployment rate during 1990-2009.

The graphical representation of the GDP growth variation (on the left hand panels) and of the budget balance (% of the GDP) (on the right hand panels) is conducted in the Figure 3.

Figure 3: Dynamics of the GDP growth variation (%) and of the budget balance in Romania (% of the GDP), during 1990–2009
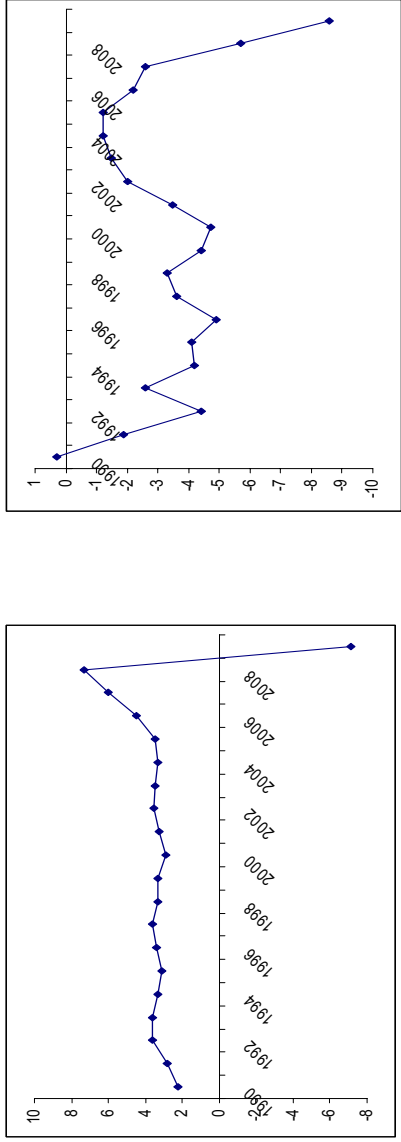
The GDP value registered great variations during the entire period 1990-2009. After 1997, the GDP value followed an ascending trend due to the increase in the activity volume, resulting in the increase of the gross added value, prevalently in the constructions and services sector. In the last years, the increase of the GDP was mainly determined by the increase of the internal demand, within which consumption represented the most dynamic component. The global economic and financial crisis led though to the inversion of the evolutionary trend of the GDP: in 2009, a decrease by 7.1% was registered, following a 7.3% increase in 2008.

The year 2009 showed the consequences of the non-sustainable feature of the fiscal and income policy practiced in the previous years. During 2004-2008, the gross salary incomes from the budgetary sector increased, on an average, with 16% per year in real terms, without a correlation with the incomes generated by the labour productivity, while the pensions were also increased independently from the contributions to the social security system. All these led to a budget deficit of 8.6% of the GDP in 2009, in comparison with 5.7% in the previous year.

The deindustrialization and privatization processes of the state companies launched after 1990 determined the increase of the unemployment rate (represented on the left hand panels) and the deterioration of population's living standard (represented on the right hand panels, Figure 4).

Figure 4: Dynamics of the unemployment rate (%) and of inflation rate (%) in Romania during 1990–2009
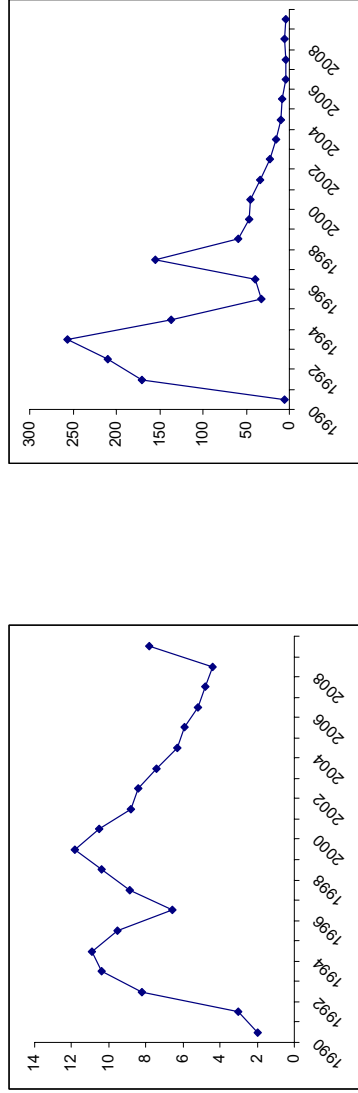
The economic measures of prices liberalization adopted in the first years after 1990 led to the increase of the inflation rate until 256.1% in 1993. Following the start of the privatization process of state companies, the unemployment rate knew an accentuated increase.

As the diagram from figure 4 also shows, the unemployment rate increased in Romania from 2.8% in 1990 to 10.9% in 1994. After this year, a fluctuating evolution was registered, with ups and downs of its level. The reductions registered can be explained by the emergence and development of other activity areas specific to the market economy, such as constructions, commerce, financial activities, real estate transactions etc. The economic and financial crisis stroke one of the areas that had known significant growth in the last years, namely the constructions sector, fact that brought about the increase of the unemployment rate with 3.4% in 2009 compared with the previous year.

The significant variations observed in the dynamics of the budget balance in Romania for the period 1990-2009, associated with the frequency of the electoral cycles call for the analysis and the empirical testing of the existence of a correlation between the registered budget deficits after 1990 and the electoral years.

Econometric model estimation

In the econometric model, in order to identify the influence of electoral cycles on the budget balance, we considered as a dependent variable the budget balance registered in Romania during 1990-2009 (% of the GDP). The explicative variables, the unemployment rate registered in *t-1* and the variation of unemployment rate between *t* and *t-1* were included in order to identify the budgetary consequences related to the economic stabilization policy.

Although the fiscal policy is largely used as a tool for the economic policy of a country, we will use as a dependent variable the budget balance which comprises both the budgetary incomes and expenditures, taking into account the economic situation of Romania in the first years of transition. The low level of public debt in the '90s determined the non-inclusion of the interest rate of debt service in the econometric model. For the study of the impact of electoral cycle on the budget balance, David Lowery (1985) believes that the decisive factors explaining the evolution of this variable derive from the economic stabilization policy. This has two components: one related to the action of the automatic stabilizers of the macroeconomic policy and the other one coming from the discretionary orientation of this policy (Blinder and Solow, 1973).

The automatic fiscal stabilizers are of keynesian nature and refer to the nature of public incomes takings (taxation of personal income, taxation of corporative profit and quasi-fiscal takings) or the nature of transfers (unemployment compensations and transfers relating to social assistance).

The econometric model that will allow the study of the correlation between the budget balance and the electoral cycles in Romania during 1990-2009 is:

$$Sold\_budg_t = \beta_0 + \beta_1 Unempl_{t-1} + \beta_2 \Delta Unempl + \beta_3 D + \varepsilon,$$

where:

$Unempl_{t-1}$ is the unemployment rate in the moment (t-1). This variable reflects the automatic component of the economic stabilization policy.
$\Delta Unempl$ is the variation of the unemployment rate between the moment t and (t-1). This variable shows the discretionary component of the economic stabilization policy.
D is a dummy variable that indicates the electoral years.
β_i represents the coefficients of econometric equation. Their estimation is made by means of the OLS method.

The results of the regression analysis are presented in the table below:

Table 1: The results of the regression analysis of the budget balance in Romania during 1990-2009

Variables	*Estimations*	*t Statistic*	*Significance degree*
Intercept	-1,072	-0,856	0,405
Unemployment$_{t-1}$	-0,215	-1,46	0,165
ΔUnemployment	-0,405	-1,973	0,067
D	-2,186	-2,941	0,010
Number of observations	19		
R Square	0,447		

Source*: Authors' computing and presentation based on the database of the National Institute for Statistics and Eurostat*

The regression coefficient associated with the variable that reflects the automatic component of the economic stabilization policy has a negative sign *(-0,215)* still, it is not statistically significant, considering a risk of *0.10*.

The coefficient associated with the variable that reflects the discretionary component of the economic stabilization policy is *-0,405* and it is statistically significant, for a risk of *0.10* (the significance level is *0.067*). This shows that there is an important correlation between the decrease in the unemployment rate and the budget deficit increases.

The coefficient of the variable *D* (-2,186), which indicates the electoral years, is also statistically significant for a risk of 0.10. This shows that the budget deficit accentuated on an average in the electoral years with 2.186% of the GDP in comparison with the other years, during 1990-2009. The most important increase of the budget deficit was registered in 2008 (-5.7%) and 2009 (-8.6%), fact explained both by the global economic and financial crisis and by the electoral cycle which began in 2008 with the Parliament elections and continued in 2009 with the presidential elections.

In Romania, the manifestation of the automatic component of income tax was strongly mitigated after 2005, when the progressive taxation of personal income has been abandoned, in favour of the flat tax rate of 16%.

Another automatic stabilizer, namely the unemployment allowance, has a reduced impact because its quantum is very low: it is between 50% and 75% of the country gross basic minimum salary, which is of 600 lei, starting from January 1st 2009 (the equivalent of 141.1 Euros, at the exchange rate from December 31st 2009).

Conclusion

Romania's main objective, since its European Union membership in 2007, is to ensure the real convergence of its economy with the economy of the European countries, simultaneously with the maintenance of the macroeconomic stability.

Two years after Romania's accession to the EU, important economic disparities are still being registered in comparison with all the EU countries. In 2009, the level of the GDP per capita expressed in PPS varied from 46% in the case of Romania, to 272% in Luxembourg, in comparison with the EU27 average across the Member States. The annual inflation rate also reached in Romania in 2009 the highest level comparing with the EU countries, of 5.6%.

During 2002-2008, the economic growth was too high, the living standard increased at a fast pace, while the budget deficit accentuated and, in only two years, annual increases by 3% of the GDP were registered.

Unlike the other European countries, in Romania, under a more severe economic contraction, of -7.1% in 2009 in comparison with +7.3% in the previous year, the inflation rate did not significantly diminish. This is explained by the depreciation of the national currency, the insufficient adjustment of public sector expenses as well as by the rigidities existing on the product and labour markets.

The global economic and financial crisis imposed tough correction measures: in 2010, the public wages declined by 25% for three months while the VAT increased from 19% to 24%.

The adoption of these correction measures was imposed by the necessity of correcting the budget deficits, accentuated by the electoral cycles registered during 1990-2009. The empirical study which was undertaken showed a significant influence of electoral cycles on the budget deficit. The estimated econometric model shows that the budget deficit accentuated in average in the electoral years with 2.186% of the GDP in comparison with the other years, during 1990-2009. The most important increase of the budget deficit was registered in 2008 (-5.7%) and 2009 (-8.6%), fact explained both by the global economic and financial crisis and by the electoral cycle which began in 2008 with the Parliament elections and continued in 2009 with the presidential elections.

In the following period, the Romanian authorities are facing a new challenge: to ensure the fiscal sustainability without affecting the perspectives of the economic growth. The factors that can bring to the maximization of the growth potential are the level and the structure of public expenditures, the sustainability of pension system, active policies on the labour market and a modern system of unemployment protection.

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