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RELEVANCE OF DATA ACCURACY FOR RESEARCH AND FORECASTS IN FINANCIAL AND FISCAL MANAGEMENT PROCESS

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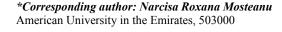| ARTICLE INFO	ABSTRACT
	The work paper Relevance of data accuracy for research and forecasts in financial and fiscal management process it aims to show how important data is when conducting economic research, especially that which refers to public macroeconomic indicators. Data lead us to take financial decision. However, if the data is not accurate, the financial decision taken based on this can drive the business in an appropriate direction, not the one we considered to be. The research will present how, sometimes the data presented as official one is not reflecting the reality, and sometimes the way that the data are presented have a different mining as in the reality. Nowadays, researchers relied in their analyses more and more on the information provided by official web sites. What the author faced in other research paper was that for the same indicators the data can be different, and, in other times, even if the data are the same, in the reality figures are dissimilar. As a conclusion of this paper, we can emphasize the need for existence of a unique, official public data base, at least at regional level, to be beneficial for business, policy decision makers, academics, teachers and students which are involved in the scientific research process.

INTRODUCTION

This paper rises from the author experience writing research papers on macroeconomic finance area. During the research activity, the research finds many discrepancies in the value of the same macroeconomic indicators, which supposed to have the same value no matter what data base is used for repentance. Or, for decision makers of for a valuable conclusion we need reliable data. Regardless of the field, accurate data collection is essential to maintaining the integrity of research. A formal data collection process is necessary as it ensures that the data gathered are both defined and accurate and that subsequent decisions based on arguments embodied in the findings are valid. The process provides both a baseline from which to measure and in certain cases an indication of what to improve (https://en.wikipedia.org/wiki/Data_collection) The research started with public (official) access information as a reference, being an accurate data source, which are updated often and many researchers, professors and students give their trust to this virtual data base.

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Literature Review

As a finance researcher or a finance expert working in a public or private sector, most all the time you need to relay on data. And thus because, researchers and financial analysts are usually transforming data into written text for analytic use (Polkinghorne, 2005). Accurate and timely information is vital to effective decision-making in almost every aspect…, whether it be undertaken by individuals, community organizations, businesses or governments (Eslake, 206). Nowadays, a unique data base (Wu, 2014), at a country and region level become a necessity if we want to have a forecast closer to the reality. Conducting the investigation for this work paper, the author discovers that, even this issue is faced by most authors, there are no to many papers to underline how crucial is this topic for decision-makers, especially in finance field.

RESEARCH METHODOLOGY

The work paper was conducted on searching the same value of indicators in different well recognized data bases. The purpose of the research was to investigate the possible source of

Table 1. Corporate tax rates level – four comparative sources (differences underlined with yellow)

Country	Source 1, [8]	Source 2, [9]	Source 3, [10]	Source 4, [11]
Austria		25%	25%	25%
Belgium		34%	29.58%	33.99%
Croatia		18%	12% and 18% (depend on income limit)	
Denmark		22%	22%	22%
France	34.43%	33.30%	33.30%	Between 15% and 33%, depend on income limit
Germany		29.79%	15.825%	29.65%
Italy		24%	24% + 3.5% for specific institutions	24%+3.9%
Spain		25%	25.00%	25%
Norway		24%	23%	23%
Romania	16.00%	16%	16%	16%
Japan		30.86%	30.86%	32.11%
China		25%	25%	25%
Bahrein		0	0	0
Kuwait		15%	X	0
Oman		15%	15%	15%
Qatar		10.00%	10%	10%
Saudi Arabia		20.00%	Between 20% and 85% depend on the activity type	20%
UAE	55.00%	55.00%		0
USA	38.91%	21.00%	21%	21% + 0–12% State/Local

Note: differences in information on the same indicators are highlighted in yellow.

Table 2. Country political stability index – four comparative sources

Country	Rank	Source 1, [12]	Country	Rank	Source 2, [13]	Country	Rank	Source 3, [14]
Norway	1	1.17	Norway	1	9.5	Norway	1	1.2
Japan	2	1.01	Austria	2	9.5	Denmark	2	2.2
Austria	3	0.96	Germany	3	9.5	Austria	3	3.6
Germany	4	0.86	Denmark	4	9.5	Germany	4	3.8
Denmark	5	0.85	Japan	5	9	Japan	5	3.8
Oman	6	0.80	Belgium	6	9	Oman	6	3.9
Qatar	7	0.87	USA	7	9	Belgium	7	4.0
Croatia	8	0.68	France	8	9	UAE	8	4.1
Spain	9	0.49	Italy	9	8.5	Qatar	9	4.1
Belgium	10	0.48	Spain	10	7.5	China	10	4.8
UAE	11	0.44	Croatia	11	7	Italy	11	5.0
Italy	12	0.35	Romania	12	7	France	12	5.3
USA	13	0.35	China	13	7	Spain	13	5.5
Romania	14	0.27	Oman	14	7	Kuwait	14	5.5
Kuwait	15	-0.15	Qatar	15	7	Bahrein	15	5.5
Saudi Arabia	16	-0.5	UAE	16	7	USA	16	5.3
China	17	0.52	Bahrein	17	6	Croatia	17	6.1
France	18	-0.6	Saudi Arabia	18	6	Saudi Arabia	18	6.1
Bahrein	19	-0.86	Kuwait	19	X	Romania	19	6.4

Note: The highest number present a highest political stability. According to the first source [12], the most political stable country in the world is Singapore (1.53 index), and the one which present the highest instability is Syria (-2.91). The third source [14] rank countries from 0 to 10. The lowest rank shows the most stable country from political point of view (the most political stable is Norway -ranked with 1.2; and the most unstable country politically is, accordingly to the source, Zimbabwe, ranked with 8.8).

Table 3. Country corruption index – four comparative sources

Country	Rank	Source 1, [15]	Country	Rank	Source 2, [13]	Country	Rank	Source 3, [16]
Denmark	1	2.24	Denmark	1	9.3	Denmark	1	90
Norway	2	2.20	Norway	2	8.6	Norway	2	85
Germany	3	1.83	Germany	3	8	Germany	3	81
Belgium	4	1.60	Austria	4	7.9	Belgium	4	77
Austria	5	1.54	Japan	5	7.7	Austria	5	75
Japan	6	1.51	USA	6	7.5	USA	6	74
France	7	1.37	Belgium	7	7.1	Japan	7	72
USA	8	1.33	Qatar	8	7	France	8	69
UAE	9	1.28	France	9	6.9	UAE	9	66
Qatar	10	0.92	UAE	10	6.5	Qatar	10	61
Spain	11	0.52	Spain	11	6.1	Spain	11	58
Oman	12	0.37	Oman	12	5.5	Croatia	12	49
Saudi Arabia	13	0.23	Bahrain	13	5.5	Romania	13	48
Croatia	14	0.19	Italy	14	4.3	Italy	14	47
Italy	15	0.05	Saudi Arabia	15	4.3	Saudi Arabia	15	46
Romania	16	0	Croatia	16	4.1	Oman	16	45
Bahrein	17	-0.06	Kuwait	17	4.1	Bahrain	17	43
Kuwait	18	-0.2	Romania	18	3.8	Kuwait	18	41
China	19	-0.25	China	19	3.6	China	19	40

Note: The highest number present a highest corruption control and stability. According to the first source [15], the most stable and secure country in the world is terms of corruption is New Zealand (2.30 index), and the one which present the highest risk is Eq. Guinea (-1.81).

Table 4. Economic freedom index – four comparative sources

Country	Rank	Source 1, [13]	Country	Rank	Source 2, [17]	Country	Rank	Source 3, [18]
Austria	1	1	UAE		77.6	UAE	1	76.9
Belgium	2	1	Denmark		76.6	Denmark	2	75.1
Denmark	3	1	USA		75.7	USA	3	75.1
Germany	4	1	Norway		74.3	Norway	4	74.0
France	5	1	Germany		74.2	Germany	5	73.8
Spain	6	1	Qatar		72.6	Qatar	6	73.1
Norway	7	1	Japan		72.3	Austria	7	72.3
USA	8	1	Austria		71.8	Romania	8	69.7
Japan	9	2	Romania		69.4	Japan	9	69.6
Croatia	10	2	Bahrain		67.7	Bahrain	10	68.5
Italy	11	2	Belgium		67.5	Belgium	11	67.8
Romania	12	2	Spain		65.1	Kuwait	12	65.1
UAE	13	5	France		63.9	Saudi Arabia	13	64.4
Qatar	14	5	Italy		62.5	Spain	14	63.6
Oman	15	5	Kuwait		62.2	France	15	63.3
Kuwait	16	4	Oman		61.0	Italy	16	62.5
Bahrein	17	5	Croatia		61.0	Oman	17	62.1
China	18	6	Saudi Arabia		59.6	Croatia	18	59.4
Saudi Arabia	19	6	China		57.8	China	19	57.4

Note: According to the first source, countries are ranked from 1 to 7, and, no.1 represents the most economic freedom country. According to the second source [17], countries are ranked from 0 to 100, the freest economic country record the highest index, and for 2018 is Hong Kong (90.2 index), and the one which record the lowest rank is North Korea (5.8 indexed). According to the third source [18], countries are ranked from 0 to 100, the freest economic country record the highest index, and again Hong Kong record the highest index.

mistake in making decisions and what solution we should take if the data do not reflect de reality on the field. The study took into consideration several relevant financial indicators with significant impact on individual, business and government level, and use different recognized data base (provided by public and private institutions). The indicators used for this investigation are: taxation country level (e.g. corporate tax), country political stability, country corruption index, country economic freeedom.

Analyzes and Findings

From the very beginning, the research revealed that quality of data, clarity and accuracy of data is desirable, because, for example, for the same economic indicator you may find different numerical values, and we do not refer only to that type of indicators for which the calculation can be interpreted or formulas slightly adjusted according to the financial and taxation legislation applicable in that country. Poor data quality can have substantial social and economic impacts. Although firms are improving data quality with practical approaches and tools, their improvement efforts tend to focus narrowly on accuracy (Wang, 1996). The present works paper focused more on accuracy of financial and fiscal data, however, the lack of accurate data was observed by researchers from other sectors of activity. The accuracy of data is very important in decision-making process, in managing flow of finance process (and one of the most prestigious management consultant – Preter Druker (http://www.stonevp.com/if-you-cant-measure-it-you-cant-manage-it/)– use to say – what you can't measure you can't not manage; in our case, we may say *you cannot conduct business management and take successful decision without an accurate data*). As it was mentioned above, this work paper started when, conducting other research papers, it was realized that data are different from one source to another, and in some particular cases from published sources and the real life. A good example is corporate tax rate level. Research found out that UAE have the highest corporate tax rate (55.0%) comparative with the rest of the country (highest in the world – see table no.1.). If an entrepreneur is willing to open a business in UAE will be scared about this tax.

The reality is different… *The UAE levies corporate tax on oil companies and foreign banks only*. It has not yet applied corporate tax on other industries (https://government.ae/en/information-and-services/finance-and-investment/taxation/other-taxes), other taxes range between 10% and 15% may apply on services provided in tourism and public food services (https://government.ae/en/information-and-services/finance-and-investment/taxation/other-taxes). Therefore, the investigation conducted realized that data related to tax rates around the world is not accurate. The first question which come was: in which data base we should trust? We considered that, in this case the most trustful data should be collected direct from the Finance Ministry of that country, from a IBFD Global Corporate Handbook [10], or for specific regions like Europe from *Eurostat*, which is a public data base only for this region. Research emphasizes that accuracy of data certainly affects the businesses decision, business plans and international investments decision too. Table no.1 comes to show some differences discovered in corporate tax rates level in countries from different part of the world (Asia, Europe, GCC, USA). The study observed that there is different data no matter the region of the world. In other world, a unique official data base it is more than necessary for international business decision approach. Another indicator which is taken into consideration when companies starts to expand their business abroad is political stability index (table no.2). The study conducted revealed again that various sources lead to different data. Data were collected for years 2017, 2018. The research notices important variations, from one source to another. We understand that, if there is a political election year, this index will rank the country on a lower level, nevertheless, there should be ranked similarly in international databases. Additional indicator which is taken into consideration when comes about international business decision, especially investments is corruption index (table no.3). The analyzes illustrates that diverse sources present different data. However, in this case the most stable and secure country are ranked with almost the same positions. The differences come for those which are at the middle of scale. Even so, this data is important and should be reflected similarly in all public data base, indifferent the source, and the way of index calculation.

All business is willing to invest and expand their activity in country where there are no economic and administrative constraints. From this perspective economic freedom (table no.4) can count in business decision process. The research tried to find databases which present more accurate this indicator. We choose three sources, and two of them were closer in countries ranking. Thus so, the study exposed again the discrepancies of data sources. Of course, if a decision must be taken, a deeply analyze should be conducted in finalizing the answer on which source can be taken as believable. In addition to that, a thorough research on the level of bureaucracy and corruption can highlight the credibility of the data source.

Conclusion

Our research major scope and concern was related to accuracy of data base and to underline the need for a unique basis of data and a clear determination of how each economic indicator is calculated and reported, what other indicators are considered, and the similarity of the reporting period. The research undertaken has found out that many databases with economic and financial indicators omit precisely to show how these indicators (such as the inflation, country risk, political risk, stability risk, foreign investment risk) are calculated or formula used varied from one institutions to another, or what is included and what is the level of the taxes presented are diverse too (in some countries, especially the Arab ones, even if there is no income tax, Muslims are paying a kind of tax named Zakat [19]) or there are differences in perception and reporting on financial-monetary indicators (interest rate, level of loans - specifying the difference between the conventional financial system and the Islamic financial system [20]).

The examination of dissimilar database has led us to the conclusion that it is often difficult to reach a clear and precise decision because of the uncertainty of the accuracy of the information used. The existence of a certain database helps not only the business to make the right investment decisions but also the public institutions in drawing up and finalizing the economic development financial policies. Even in this research, we have encountered impediments in finding concrete information on the stability of the exchange rate across the countries under review, grouped into four geographical regions (Asia, Europe, GCC and the USA). And data related to currency stability are often searched when comes about foreign investments [21],[22].

As a conclusion of this paper, we can emphasize the need for existence of a unique, official public data base, at least at regional level (such as Eurostat [23]), to be beneficial for business, policy decision makers, academics, teachers and students which are involved in the scientific research process. For the existence of a unique, official data base, we believe it is necessary to create a single reporting framework for all economic indicators using the same computing system. Moreover, the annual update of this database is more than necessary, reflecting the real macroeconomic changes of each country or region, and allowing to have an accurate image of the financial and social situation, helping the business environment and economic policy makers make the most appropriate decisions on the sustainable and stable development of the respective economic sectors and to prevent potential economic slippages

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