Nicolaus Copernicus University – 16 pts

The Faculty of Economic Sciences and Management – 15 pts

<Student’s first name and surname> Eva Smith – 15 pts

Student’s number: 287 111 – 12 pts

Major: Economics/Management - 12 pts

<Master’s, Bachelor’s or Engineering> Thesis – 13 pts

Unemployment of people with disabilities in Poland due to their level of education – 18 pts

Thesis supervisor – 13 pts

Prof. dr hab./dr hab./dr, first name and surname

Toruń 2021 – 13 pts The title page without a printed page numer

Blank page

**(no page number as well )**

**Table of contents**<style: chapter title>

 Table of contents should:

* contain all separated and numbered components of the work (e.g. introduction, chapters, sub-chapters, literature, lists of tables, appendix, etc.),
* follow the title page (on the third page of the thesis)
* we recommend automatic insertion of the table of contents.

The table of contents should be generated automatically. An example is on the next page:

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[1.2.2. Access to education, educational background and skills <style: subsubsection title> 9](#_Toc95678965)

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[2.3. Short-term approach - ECM error correction model <style: subsection title> 13](#_Toc95678971)

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Introduction <style: chapter title - starts with a new odd page> - the same as the chapter titles>

The subject matter of the thesis must fall within the scope of **economic sciences**, although the papers referring to other fields of knowledge, such as law, sociology, psychology or geography, are allowed or even desirable. The diploma thesis must concern a **precisely defined economic problem**, which should be reflected in the title.

The introduction of the thesis should include:

* the **author's (i.e. student’s) motivation** to study the topic,
* identifying the **subject of the research** and defining the significance of the topic under consideration (also for business practice),
* presentation and explanation of the **aim of the thesis**, as well as its objectives,
* **research hypotheses** or research questions,
* **spatial and temporal scope** of the presented problems,
* description of the methods used in the thesis,
* presentation of the **nature and type of sources** used,
* **description of the intended research procedure**, taking into account the paper structure.

This is an example of an introduction:

The paper deals with the negative impact of the minimum wage on employment, with particular emphasis on employment among young people up to 29 years of age. This problem is rarely discussed, despite the fact that it is common in the European Union countries, and its effects are highly detrimental to both the labour market and the entire economy.

 The aim of this study is to prove the existence of a negative impact of the minimum wage on employment and to verify which factors can minimize or maximize this effect. The paper objectives cover the description of the minimum wage development, as well as the a study of the impact of the increase in the minimum wage on employment in the short and long term.

 The work consists of three chapters - theoretical (concerning the theory of economics for the research topic), methodical and empirical.

 The first chapter presents the history of the creation of the minimum wage category and its development; specific goals of the minimum wage as a measure to tackle social inequalities in Europe and its negative impact on employment, especially among young and unskilled people, were identified.

 The second chapter presents the methods used in the research conducted in the empirical chapter. It describes methods of modeling non-stationary time series in the short run (ECM models) and in the long run (ADL models).

 In chapter three, a study of the impact of the increase in the minimum wage on employment in the short and long term, with the distinction of employment of young people up to 29, in three selected EU countries - the Netherlands, France and Spain. These countries differ in terms of the unemployment rate, the structure of the labour market and the strategy for determining the minimum wage; they also belong to different groups of market systems (respectively: Nordic, Continental and Mediterranean). The analysis was carried out in two versions - with the minimum wage expressed in absolute terms and the minimum wage expressed in relation to the average wage (Kaitz coefficient). The time frame of the study covered the years 1980–2020, annual frequency data was used (data from Eurostat).

 The paper ends with broadly defined conclusions drawn on the basis of the conducted research. Particular attention was paid to….

Chapter 1 Income inequality <style: chapter title>, begins with a new odd page>

1.1. Introduction <style: subsection title>

The belief that income inequality is a natural phenomenon caused by the operation of all known market forces in the market turns out to be misleading, because the state's participation in the market game causes it to directly or indirectly influence phenomena such as inequality. And so, for example, Stiglitz (2015, p. 35) expresses the conviction that inequalities in society are not fully shaped by unfettered market forces and that countries' economic policies have a large share in this. By using an appropriate redistributive policy strategy, the state is able to deal with the growing level of income inequality, especially in developed economies, where this problem has been worsening in recent times.

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1.2. Determinants of income inequality <style: subsection title>

1.2.1. Demographic factors and household structure <style: subsubsection title>

 Apart from the age structure of the society, significant implications for the level of income inequality have the characteristics of households, which are examined in terms of the number, age and mutual relations between family members in the household. It turns out that single mothers who have never been married show lower incomes than widowed or divorced ones, in addition, single mother families are five times more likely to be poor, i.e. they have income that meets only the most important needs from families with two parents who are married (Martin, 2004, str. 425).

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1.2.2. Access to education, educational background and skills <style: subsubsection title>

 In the literature on the subject, education is indicated as one of the most important factors influencing income inequality. Better access to higher education can increase the earning opportunities of the poorest sections of society, leading to a reduction in poverty and wage inequality (Checchi, 2000).

1.3. The impact of the minimum wage on employment, including employment among young workers <style: subsection title - if the title goes to the second line, the second line should be indented - always in the titles>

Chapter 2. Modelling of non-stationary time series in short- and long-term perspective <style: chapter title>

2.1. Introduction < style: subsection title>

 In the second chapter, the methods of statistical multivariate analysis will be presented, which refer to the group of statistical methods by means of which the measurements of at least two variables describing the objects of the study are simultaneously analyzed. The data used in the empirical analysis come from the website of the Central Statistical Office in Poland, Główny Urząd Statystyczny (Bank Danych Lokalnych, 2021).

2.2. Basic concepts of the statistical multivariate analysis <style: subsection title>

2.2.1. Hellwig’s method <style: subsubsection title>

 In 1968, Z. Hellwig was the first to propose a method consisting in linear ordering of objects with the use of a formula. Determining a taxonomic measure of development takes place in several stages, which are presented below.

The first step in constructing a Hellwig's synthetic measure is the normalization of diagnostic variables. Thanks to standardization, it is possible to compare variables with different value ranges. It consists in transforming the matrix of observations X with n rows and k columns into a matrix of standardized variables according to the following formula (Bąk, 2018):

$z\_{i,j}=\frac{x\_{ij}-\overbar{x\_{j}}}{s\_{j}}$, (1)

gdzie:

$i=1…n$,

$j=1,…k$,

$\overbar{x\_{j}}=\frac{\sum\_{i=1}^{n}x\_{ij}}{n}$ – is the arithmetic mean of a given variable,

$s\_{j}=[\frac{1}{n}\sum\_{i=1}^{n}(x\_{ij}-̿)^{2}]^{\frac{1}{2}}$ – is a standard deviation.

2.2.3. Interpretation of the ADL model assuming long-term equilibrium <style: subsubsection title>

 Long-term equilibrium is the state towards which the system…

2.3. Short-term approach - ECM error correction model <style: subsection title>

2.3.1. Testing co-integration between variables <style: subsubsection title>

 The concept of co-integration was introduced into literature by Engle and Granger in 1987…

2.4. Statistical verification of the model <style: subsection title>

 Statistical verification of the model consists in assessing the significance and stability of parameters and checking whether…

Chapter 3. Research on the determinants of inequality in the European Union countries <style: chapter title>

3.1. Introduction <style: subsection title>

 This chapter examines the potential determinants of income inequalities in the European Union countries.

Important: this chapter is to correspond with the content of chapter one, i.e. the content contained there is to serve as the basis for the analyzes carried out in this chapter and constitute the basis for the economic interpretation of the results.

3.2. The level of equivalent income inequality in the countries covered by the study <style: subsection title>

 Before proceeding with the study, it is worth taking a closer look at the basic….

3.3. Data characteristics <style: subsection title>

 The analysis used data in the form of annual time series. The study period is 1980–2015 for Spain and the Netherlands, 1983–2015 for France. The shorter survey period for France is due to a gap in employment figures. The following time series were used in the analysis:

* employment among people aged 20–29, expressed in thousands (Z\_29),
* employment among people aged 20–64, expressed in thousands (Z\_64),

There follow tables and figures with appropriate comments ….

3.3. Following sub-chapters describe the stages of your research <style: subsection title>

 The number of these subsections depends on the concept of empirical research and its scope. The results in this chapter must be processed, i.e. they cannot be results in the form of computer printouts (as they are printed from the program), but compiled into tables, the layout of which makes it easier to draw conclusions, e.g. in the context of the verification of research hypotheses.

3.4. Following sub-chapters describe the stages of your research <style: subsection title>

 Depending on the scope of the study, its design and statistics, etc., the number of sub-chapters will vary from one study to another.

Conclusions <style: chapter title>

Conclusions should:

* summarize the research problem presented in the introduction, including the aim/ objectives of the thesis and research hypotheses,
* be a summary of research results, i.e. not a literal repetition, but a creative, synthesizing presentation,
* include an attempt to evaluate the achievement of such results and no other (e.g. due to the access to sources, the possibility of conducting specific research, etc.),
* contain information on research problems/limitations raised, but not resolved or not fully resolved in the paper.

References <style: chapter title >

The reference list used in the thesis should:

* be formatted according to APA7 referencing style
* be prepared in alphabetical order (for BA thesis at least 20 items, and for MA theses at least 30).
* include the full information on the sources.
* the list does not have to be numbered (single space, not 1.5 as in the main text), but it is recommended.
* single space, not 1.5. as in the main body of the text

Below there is an example of a Reference list inserted "automatically" in MS Word based on the in-text referencing:

References

*Bank Danych Lokalnych*. (2021). Pobrano 07.25.2021 z lokalizacji: Witryna Głównego Urzedu Statystycznego: https://bdl.stat.gov.pl/BDL/start

Bąk, A. (2018). Zastosowanie metod wielowymiarowej analizy porównawczej do oceny stanu środowiska w województwie dolnośląskim. *Wiadomości Statystyczne*, strony 7-20.

Checchi, D. (2000). Does educational achievement help to explain income inequality? *Departmental Working Papers 2000-11*. Department of Economics, University of Milan, Italy. Pobrano 06 21, 2021 z lokalizacji Ideas: http://wp.demm.unimi.it/files/wp/2000/DEMM-2000\_011wp.pdf

Martin, M. A. (2004). Family Structure and Income Inequality in Families with Children 1976 to 2000. *Demography, 3*, strony 421-445.

Stiglitz, J. E. (2015). *Cena nierówności. W jaki sposób dzisiejsze podziały społeczne zagrażają naszej przyszłości?* Warszawa: Wydawnictwo Krytyki Politycznej.

Below there are other examples of APA-style reference list:

Article

Szarfenberg, R. (2017). Wpływ świadczenia wychowawczego (500+) na ubóstwo na podstawie mikrosymulacji*. Polityka Sołeczna*,4, pp. 1-6.

Abelson, P., Joyeux, R., & Mahuteau, S. (2013). Modelling House Prices across Sydney. *Australian Economic Review*, 46(3), pp. 269–285. DOI:10.1111/j.1467-8462.2013.12013.x.

Note that in the reference section the articles should include the article’s pages. However, it is not required in the main text until it is literal citation of text.

Book

Rzońca, A. (2014). *Kryzys banków centralnych. Skutki stopy procentowej bliskiej zera*. Warszawa: C. H. Beck.

Chapter from a Book

Jinushi, T., Yoshihiro K. & Ryuzo, M. (2000). Monetary Policy in Japan Since the Late 1980s: Delayed Policy Actions and Some Explanations. In: R, Mikitani & A. S. Posen (ed.), *Japan’s Financial Crisis and Its Parallels to U.S. Experience*. Washington: Institute for International Economics.

Each word in English title should begin with a capital letter except for conjunctions both in case of books and articles.

Working Paper

Hasan, I., & Mester, L. J. (2008). Central Bank Institutional Structure and Effective Central Banking: Cross-Country Empirical Evidence. *Federal Reserve Bank of Philadelphia Working Paper*, no. 5. DOI:10.21799/frbp.wp.2008.05.

In the case of *Working Paper* only the its number is given, without specifying pages. If the publication has DOI, include it.

Reports

World Bank. (2011). The World Bank Annual Report 2011. DOI:10.1596/978-0-8213-8828-0.

UNICEF. (2012). Child Poverty and Inequality: New Perspectives. Division of Policy and Practice.

Conference papers/speeches

Debelle, G. (2018). Twenty-five years of inflation targeting in Australia [conference presentation]. RBA Conference 2018, Sydney, April 12th. <https://www.bis.org/review/r180417e.htm>.

Websites

Bank Danych Lokalnych. (2021). Downloaded on June 25th, 2021 from: Witryna Głównego Urzedu Statystycznego. Https://bdl.stat.gov.pl/BDL/start.

Other sources

When compiling a list of other sources, it is worth remembering that legal acts should be ordered first by rank, secondly by chronological order, i.e. by the date of their enactment.

Sample list of referencing:

APA7 basic rules: <https://owl.purdue.edu/owl/research_and_citation/apa_style/apa_formatting_and_style_guide/reference_list_basic_rules.html>

##  Reference List: Author/Authors

https://owl.purdue.edu/owl/research\_and\_citation/apa\_style/apa\_formatting\_and\_style\_guide/reference\_list\_author\_authors.html

##  Reference List: Articles in Periodicals

<https://owl.purdue.edu/owl/research_and_citation/apa_style/apa_formatting_and_style_guide/reference_list_articles_in_periodicals.html>

## Reference List: Books

<https://owl.purdue.edu/owl/research_and_citation/apa_style/apa_formatting_and_style_guide/reference_list_books.html>

## Reference List: Electronic Sources

<https://owl.purdue.edu/owl/research_and_citation/apa_style/apa_formatting_and_style_guide/reference_list_electronic_sources.html>

**APA legal references:**

<https://owl.purdue.edu/owl/research_and_citation/apa_style/apa_formatting_and_style_guide/apa_legal%20references%20.html>

https://libraryguides.vu.edu.au/apa-referencing/7LegislationCases

## More details on APA7 formatting at:

https://owl.purdue.edu/owl/research\_and\_citation/apa\_style/apa\_style\_introduction.html

The list of Tables and the List of Figures

The list of Tables/ Figures (if present at work) should contain the consecutive number of the Tables and Figures, respectively, their title and commencing page number.

The example below shows the numbering taking into account, first, the chapter number where a given Table/Figure is situated, and then the consecutive Table/Figure number. You can also number your Tables/Figures consecutively throughout the work without taking into account the chapters in which they are located, i.e., respectively: 1, 2, 3...., n.

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Comments on Tables and Figures

1. The **Table** consists of a title, the table itself and notes/sources.

The **title** should concisely describe the content of a given table and include all constant features of the presented community, and thus inform who or what is presented (e.g. Working people), where (e.g. in the Kujawsko-Pomorskie Province) and when (e.g. in 1999 –2002), as well as features (e.g. by gender). The unit of measurement is often given under the title (e.g. in thousands of people, in millions of pounds, in%).

The **table** itself consists of rows and columns. Row and column headers are treated as sentences. At the intersection of rows and columns, cells are created, which should be filled with numbers, and if this is impossible - with conventional signs. Conventional signs commonly used in tables are following:

* a dash (-) means that the phenomenon does not occur,
* zero (0) means that the phenomenon occurs in small amounts, less than half of the measurement unit used to express its size,
* a dot/period (.) Means that there is no information about a given phenomenon, or that the information is unreliable,
* a cross (x) means that due to the layout of the table, it was impossible or pointless to fill in a given field,
* (including:) means that not all components of the presented total sum are not given.

In **Notes**, if necessary, there is information on the method of measurement, aggregation, comparability over time, etc., and always on the source (s) of data included in the table (Source: ......).

Table 1.1. The structure of energy consumption in 2012 in the EU-14 countries (in%) and the index of knowledge-based economies, KEI (2012 ranking) – style: Table title <no dot/period in titles>

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Country | Solid fuels | Crude oil | Gas | Renewables | Nuclear | KEI 2012 |
| High-level knowledge-based economies – style: Table\_main text |
| Sweden | 4 | 25 | 2 | 34 | 33 | 9,43 |
| Finland | 13 | 26 | 9 | 29 | 17 | 9,33 |
| Denmark | 14 | 39 | 19 | 23 | 0 | 9,16 |
| Netherlands | 10 | 41 | 40 | 4 | 1 | 9,11 |
| Middle-level knowledge-based economies |
| Germany | 25 | 34 | 22 | 10 | 8 | 8,99 |
| Ireland | 17 | 47 | 29 | 6 | 0 | 8,86 |
| UK | 19 | 34 | 33 | 4 | 9 | 8,76 |
| Belgium | 5 | 39 | 26 | 6 | 18 | 8,71 |
| Austria | 10 | 36 | 22 | 30 | 0 | 8,61 |
| Spain | 12 | 42 | 22 | 13 | 12 | 8,35 |
| France | 4 | 31 | 15 | 8 | 42 | 8,21 |
| Low-level knowledge-based economies |
| Italy | 10 | 37 | 38 | 13 | 0 | 7,89 |
| Portugal | 13 | 45 | 18 | 20 | 0 | 7,61 |
| Greece | 29 | 48 | 13 | 9 | 0 | 7,51 |

Note: KEI stands for (…) - style: Table\_info. **<**but here: the reference ends with the dot/ period**>**

Source: Eurostat database, Complete Energy Balance. Style: Source.**<**but here: the reference ends with the dot/ period **>**

1. **The Figure** consists of a title, a chart/graph/picture etc, and notes.

The Figure **title** contains the same information as the Table title. The **chart/graph/picture** etc., contains a graphic image of the phenomenon. The Figure type determines the area of the chart and it should be adapted to the type of phenomena and the purpose of their presentation. Each Figure must be based on a certain scale suited to the purpose of the presentation. In justified cases, the scale of the Figure may be interrupted.

The **Notes** contain the explanations and, like in the Table, other necessary information and **always the source** of the data on which the Figure is based.

Figure 1.1. Energy consumption intensity in the EU-14, 1995–2012 (in kg of oil equivalent per 1,000 dollars in 2005 prices) style: Figure title <no dot/period in titles>

|  |  |
| --- | --- |
|  |  |
|  |  |

Source: Eurostat database (February 8th, 2017). Style: Source < but here: the reference ends with the dot/ period>

< Figures have been copied from Excel into a table - the boundaries of rows and columns have been removed - this means that the charts do not move throughout the text >