



Anton de Kom Universiteit van Suriname

## Bibliotheek

### APPROVAL

NAAM: Bainathsah, Gregory.....

verleent aan de AdeKUS kosteloos de niet-exclusieve toestemming om haar/zijn afstudeerscriptie via de catalogus full-text beschikbaar te stellen aan gebruikers binnen en buiten de AdeKUS.

Plaats en datum, Paramaribo, 11-08-2021.....

Handtekening.....



**ANTON DE KOM UNIVERSITEIT VAN SURINAME**  
**FACULTEIT DER MAATSCHAPPIJWETENSCHAPPEN**

## **Minimum Wage: A double-edged sword**

Thesis ter verkrijging van de graad van Bachelor of Science in de Economie

Studierichting : Economie  
Naam : Bainathsah Gregory  
Begeleider : Drs. R. Soentik  
Paramaribo, augustus 2021

# Preface

To complete the bachelor's program in Economics at the Faculty of Social Sciences at the Anton de Kom University of Suriname, it is necessary to write a thesis. To write this thesis I have done qualitative research, reviewing the literature, consulting the best (in my opinion) available sources. Economic science is full of contradictory information meaning that it is necessary to have a neutral vision to maintain intellectual integrity.

The subject of my thesis is: Minimum wage a two-sided sword - A literature review of the differences in perception regarding the minimum wage concept; and is intended to find out what theoretical framework should be used in assessing the Surinamese minimum wage debate.

I would like to give thanks to the faculty & staff of the Anton de Kom University of Suriname for their academic training, especially those that have guided me in the process of writing this thesis. They are: drs. R. Soentik (main thesis supervisor), drs. B. Mathoera (secondary thesis supervisor) and drs. R. Dwarka (Dean of the Economics-department at the Faculty of Social Sciences).

Gregory Bainathsah

Paramaribo, August 2021

## **Abstract**

This paper researched whether the Keynesian or Neoclassical economic paradigm would be best applicable when viewing and addressing the minimum-wage question in Suriname. The Surinamese labor market is dominated by inefficient government, high inflation, and a high informal sector (even relatively to other Latin American and Caribbean countries), making efficient minimum wage policy difficult to implement.

Based on the literature, the conclusion is that, because of the inflexible nature inherent to the minimum wage legislation, neither a Keynesian nor Neoclassical approach would be valid since both reject long-term government interventionism in the market. Suggested is either (1) a fully Neoclassical approach (no minimum wage), (2) a temporary approach (a temporary minimum wage to correct market imbalances), (3) a form of minimum wage structure in which the government subsidizes the difference between the lower market wage and the higher minimum wage.

Keywords: Suriname, minimum wage, Neoclassical, Keynesian, Latin America, Caribbean

# Table of Contents

Preface .....	2
Abstract.....	3
1. Introduction .....	6
1.1 Motivation.....	6
1.2 Research questions .....	6
1.3 Research purpose .....	7
1.4 Demarcation.....	7
1.5 Academic and Social Relevance .....	7
1.6 Reading guide.....	8
2. Theoretical Frameworks around Minimum Wage.....	9
2.1 General definition of the concept.....	9
2.2 Theoretical interpretations.....	11
2.3.1 Neoclassical theory .....	12
2.3.2 Keynesian perspective .....	17
2.3.3 Fundamental disagreements between both.....	24
3. Practicalities of Minimum wage.....	26
3.1 Setting a minimum wage .....	26
3.2 Minimum wages in the region .....	28
3.3 Demographics of minimum wage earners.....	29
4. Empirical Studies.....	34
4.1 In favor of the Neoclassical view .....	34
4.2 In favor of the Keynesian view.....	40
5. Suriname and minimum wage .....	43
5.1 History of the Surinamese minimum wage.....	43

5.2	Labor market dynamics.....	45
5.3	Macroeconomic data .....	54
5.3.1	Inflation .....	54
5.3.2	Unemployment .....	56
5.3.3	GDP Growth .....	56
5.3.4	Worldwide Governance Indicators .....	57
6.	Conclusion and Suggestions.....	60
	Bibliography .....	64
	Appendix 1: Terminology in ABS report.....	68

# 1. Introduction

## 1.1 Motivation

The global minimum wage debate has worldwide been one of the most interesting and heated economic topics debated and discussed for more than 100 years, with the first iteration being in New Zealand in 1894. In those years, minimum wage coverage has increased greatly and in 2015, Suriname became the last of the 15 CARICOM countries to formally legislate the minimum wage.

To find which framework(s) can best be applied to economy of Suriname, one must rationally and skeptically delve into the available literature and assess the theoretical and practical arguments presented by both sides in order to come to an objective (or as close as possible) analysis.

To preserve a sense of intellectual integrity, I have taken sources from Nobel Prize winning economist Milton Friedman (considered by *The Economist* in the article “A heavyweight champ, at five foot two” (2006) to be “most influential economist of the second half of the 20th century” all the way to Richard Wolff, considered by the *New York Times* to be “America’s foremost expert on Marxist economics” (Davidson, 2012). Any conclusion following from this paper (if adopted by the economic advisory) would deal with jobs, especially the low-wage jobs of those that need the most help. That makes the burden of responsibility high. For that reason; this research has been done to the best of my ability with the utmost sense of integrity.

## 1.2 Research questions

**What economic framework should be dominant in the Surinamese economy when dealing with the minimum wage debate?**

That question is solved by answering the following sub-questions:

1. What are the dominant theoretical viewpoints surrounding the minimum wage?
2. What are the pros and cons of each?
3. What viewpoint would be best implementable in Suriname?

### **1.3 Research purpose**

The purpose of this paper is to figure out if the current paradigm regarding the Surinamese minimum wage framework is correct. Suriname is still young in its implementation of the minimum wage and can learn a lot from data from other countries and the theoretical frameworks surrounding them.

### **1.4 Demarcation**

According to the ILO, the minimum wage is a tool to combat both poverty and inequality. This paper has been limited to researching only the effects of the minimum wage on poverty and not inequality. The reason for this is that many economists, including Brook & Watkins, (in their book *Equal is Unfair*, 2016) argue that inequality in of itself is not necessarily a problem so long as the entire population is gaining prosperity. In fact, inequality is the natural effect of creating wealth and prosperity and is thus desirable. Brook & Watkins argue that presented with the choice of low poverty and high inequality, and high poverty and low inequality; that the former is a more favorable decision.

### **1.5 Academic and Social Relevance**

Depending on the viewpoints, a minimum wage can either help or damage the most vulnerable amongst our society. Figuring out which economic viewpoints should be addressed for this law should be very helpful to those amongst us who need it the most. This paper aggregates data and compares it to Suriname. This is data ranging from macroeconomics to labor markets. This



research can also be built upon by monitoring the minimum wage effects, to promote a market in full equilibrium.

## **1.6 Reading guide**

This thesis is divided up as follows: The second chapter deals with an introductory and theoretical framework regarding the minimum wage. Chapter 3 deals with the practical aspects for setting a minimum wage and what factors to consider. Chapter 4 provides empirical evidence for both sides; for and against the minimum wage. Chapter 5 explains the Surinamese minimum wage situation as well as provides macroeconomic data. And finally, chapter 6 provides conclusions and suggestions for how to proceed further.

## 2. Theoretical Frameworks around Minimum Wage

This chapter gives an overview of the principal components and theories when it comes to understanding the subject of minimum wages.

### 2.1 General definition of the concept

To define a minimum wage, we first need to define a “wage”. According to the ILO, what they consider a wage (n.d., p. 4):

The broad definition of “wages” – and the same is true for “minimum wages” – generally refers to gross earnings or gross remuneration. This means total remuneration in cash and in kind paid to employees before any deductions are made by the employer in respect of taxes, contributions of employees to social security and pension schemes, life insurance premiums, union dues or other obligations of employees. Wages therefore differ from employees’ disposable take-home pay, which is what remains after taxes, pensions, social security contributions, or other deductions.

The International Labor Organization (ILO) defines the term minimum wage as “the minimum amount of remuneration that an employer is required to pay wage earners for the work performed during a given period, which cannot be reduced by collective agreement or an individual contract” (ILO, n.d., p. 4). The ILO considers this a fundamental right of any employee to be guaranteed a living wage.

The purpose of the minimum wage – according to the International Labor Organization (ILO) – is twofold:

- Primarily: To protect workers against unduly low pay (reduce poverty)

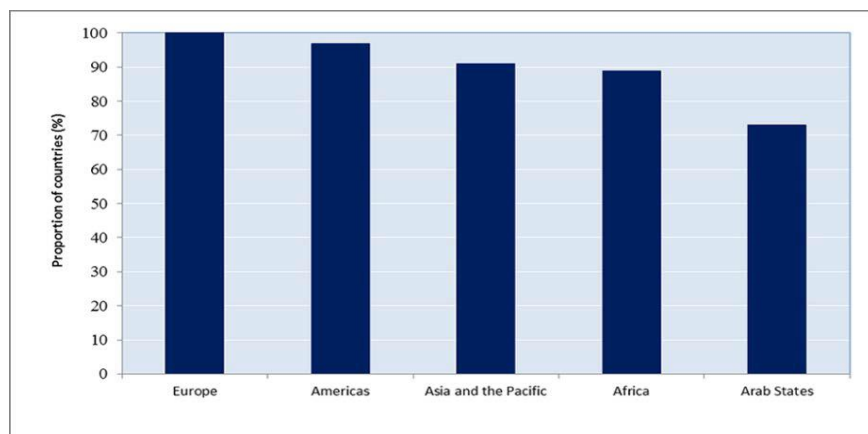
- Secondly: To help ensure a just and equitable share of the fruits of progress to all, not only in terms of class systems but also gender systems (decrease economic and gender inequality) (ILO, n.d., p. 3).

According to Maloney and Mendez (2004), the minimum wage may be set on a national or regional level, or even depending on occupation, industry/activity, firm size, or any combination of these. While the government alone sets the minimum wage in some countries, a tripartite committee comprised of government, worker representatives, and employer representatives is usually the wage-setting body. The minimum wage is usually changed on a regular basis (every six months or annually) in some countries, with discretionary changes in others. Adjustments to the minimum wage may be tied to inflation, GDP fluctuations, the poverty line or market wage. Although many countries have a formula to set the minimum wage, in the end, the calculation is “fairly random”, based on issues like: public perceptions of fairness; economic expectations; and a myriad of other criteria that are difficult to weight or quantify in an objective manner depending on the individual societies’ needs. (Maloney and Mendez, 2004)

Explicitly mentioned by the ILO is that minimum wage systems should not be the sole policy dealing with poverty and unemployment, but instead be defined and designed in a supplementary way to reinforce other social and employment policies.

According to page 6 of the ILO Minimum Wage Policy Guide, 92% of the 186 member countries have a federally recognized minimum wage in 2015. According to the ILO Global Minimum Wage Report, there has also been a growing trend of either implementing new minimum wages, or adjusting the minimum wages to a higher level (ILO, 2009, p. 35).

Figure 1 Minimum Wage Existence by Region



Source: ILO, n.d., p. 6

## 2.2 Theoretical interpretations

To try and understand the proceedings within the economy many systems/theories have been developed over the years. The economist Wolff gave a good description for these theories: “Economic theories are attempts to understand how economies work. They exist in our minds alongside theories about how everything else that we care about in life works.” (Wolff & Resnick, 2012, p. 4.) which means that these theories are, at their core, just an attempt to understand the causation of economical tendencies.

Many economic theories have developed over the years with the intent to understand the cause/effect relationship between the rise and fall of economies.

While there are many economic theories, they mainly range in a spectrum of:

1. Neoclassical school (with an extreme at “Anarchism<sup>1</sup>”)
2. Keynesian school (with an extreme at “Marxism<sup>2</sup>”)

<sup>1</sup> Anarchism is an ideology in which there is (almost) no centralized government control (Miller, 1984, p. 3).

<sup>2</sup> Marxism is an ideology in which government controls the means of production (Wolff & Resnick, p. 41).

In the next few paragraphs two theories will be discussed, because these can help answer whether the argument for implementing minimum wages, is one we should even consider having.

### **2.3.1 Neoclassical theory**

#### *Philosophical and Economic basis*

The Neoclassical economic theory is a part of humanism, a tradition of individualism.

Humanism translated into economics becomes capitalism. If unhampered by external interventions (i.e., government policy), the “free-market” exchanges among such self-seeking individuals will result in the greatest possible well-being (equated with wealth) for everyone, assuming their differing contributions to production and desires for consumption. (Wolff & Resnick, 2012).

According to Karstensson, 2017, p. 1:

The Classical theory was associated with James Mill and David Ricardo ... Capitalism, in their view, was an essentially stable form of economic organization. The unfettered market would cultivate growth in production, more-or-less full employment, and stable average price levels over the long run. While temporary periods of instability might occur because of changes in demand and/or supply conditions in particular, they would not persist over long periods of time.

Neoclassical theory has three core economic assumptions, according to E. Roy Weintraub (though there might be some small differences within the Neoclassical discipline):

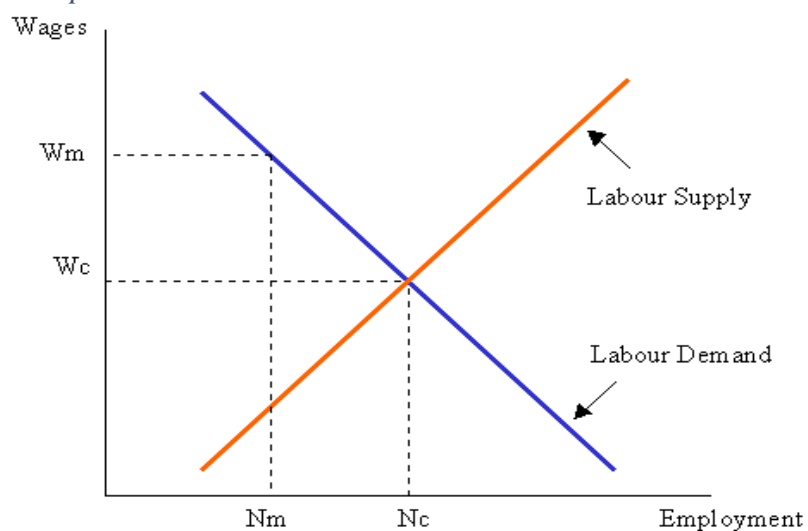
1. People have rational preferences
2. Individuals maximize utility and firms maximize profits
3. People act independently based on full and relevant information (Weintraub, 2007).

#### *Approach to minimum wage*

The Neoclassical model suggests that wages are similar to consumer goods, in which the supply and demand of labor intersect at the market equilibrium, resulting in full employment. Any type

of artificial price floor/ceiling (minimum wage) imposed by government will affect the supply/demand of labor, resulting in a so-called “deadweight loss”. (Pierre-Louis Marchal, 2014).

*Figure 2 Labor Supply and Demand Curve in a Competitive Marketplace*

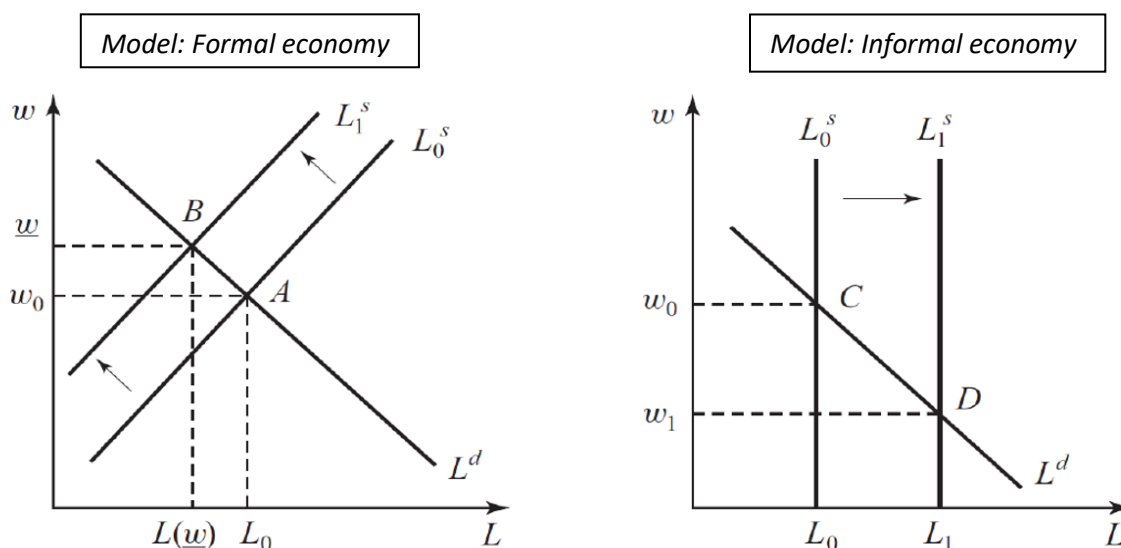


*Source: Krasniqi, 2007, p. 8*

The Neoclassical paradigm believes that by introducing (or raising) a minimum wage in a competitive labor market where firms maximize profit, employers will be incentivized to decrease demand for labor while the supply of labor will increase unemployment (Krasniqi, 2007).

At the point of the equilibrium market wages,  $W_c$ , and employment  $N_c$ , the market is at a perfect equilibrium (full employment). If, however, minimum wage is increased to  $W_m$ , employers will not seek to hire new people and therefore the demand for labor will fall and so will the employment rate. The leftward move along the horizontal curve from  $N_c$  and  $N_m$  is the number of unemployed people due to wage increases.

Figure 3 Supply and Demand Curve in the formal and informal economy



Source: Boeri & van Ours, 2014

This effect will also be apparent in the informal economy. Even the ILO warns in their policy guide that high rates of non-compliance in the formal economy can have spillover effects into the informal economy. Workers who lose their jobs because of a minimum wage are expected to move out of the formal sector and into the informal sector where “employers do not have secure employment contracts, workers’ benefits or representation, social protection” (ILO, n.d., p. 40). The increased supply of workers in the informal sector would likely reduce wages, increasing the overall distortion in the labor market. It is also logical that when the entrepreneur has a large pool of potential employees, that discrimination becomes cheaper than otherwise would have been in a free market, leading to minority-groups getting disproportionately disadvantaged. Nobel Prize winning economist Milton Friedman put it in harsh terms, stating that “I am convinced the minimum wage is the most anti-Negro law on our statute books—in its effect not its intent” (Friedman, 1966, p. 1). These statements are echoed by Thomas Sowell:

Another group disproportionately affected by minimum wage laws are members of unpopular racial or ethnic minority groups. Indeed, minimum wage laws were once advocated explicitly because of the likelihood that such laws would reduce or eliminate the competition of

particular minorities, whether they were Japanese in Canada during the 1920s or blacks in the United States and South Africa during the same era. (Sowell, 2011, p. 249).

Sowell (2011) also argues that in absolute terms, no one is inherently (un)employable, it is only relative to a given pay scale that someone becomes (un)employable. The real problem is that those workers' productivity is low and not the wages in of itself. By making it illegal for someone to pay less than the minimum wage is not increasing productivity. According to him, "the real minimum wage is always zero, regardless of the laws" (Sowell, 2011, p. 238).

During times of a recession, employers will be less able to afford to pay the minimum wage as labor demand falls, especially for small business-owners. Clemens & Wither, 2014 argued that in the United States during the 2008 financial crisis that: "binding minimum wage increases significantly reduced the likelihood that low-skilled workers rose to what we characterize as lower middle-class earnings ... Reductions in upward mobility thus appear to follow reductions in access to opportunities for accumulating work experience" (Clemens & Wither, 2014, p. 36). This finding is similar to the 2020 Covid-19 crisis, in which "more than a third of full-time American workers have had their pay cut." (DeMarco, 2020)

In addition to the employment effects, the Neoclassical model allows for other ways for offsetting the higher wage costs, by: reducing the number of hours worked per employee; passing on increased labor prices to consumers in the form of higher prices for goods and services; decreasing non-wage benefits (such as training or healthcare); and changing the composition of their workforces, for example by switching unskilled workers for more skilled workers (Leonard, 2000, p. 139).

Wilson (2012) also concluded that many minimum wage workers live in families that are above the poverty level.

According to the United States Bureau of Labor Statistics, only 20.8 % of all minimum wage workers are family heads or spouses working full time, 30.8 % were children, and 32.2 % are young Americans enrolled in school. The popular belief that minimum wage workers are poor adults (25 years old or older), working full time and trying to raise a family is largely untrue. Just 4.7 % match that description (Wilson, 2012, p. 3).



The relationship between formal and informal labor mobility, as well as unemployment effects should be more emphasized in developing countries, as opposed to developed countries since “the limited evidence for Latin America indicates that the wage compression and employment effects are considerably stronger in developing countries than they are in developed countries” (Lemos, 2006, p. 2). This is further echoed by Fitzbein, who even argues that a reduction in minimum wages would have more beneficial effects for equity and efficiency in developing countries (Fitzbein, 1992, p. 6).

Grimshaw and Miozzo (2003) argue that while not an explicit Neoclassical theoretical argument against minimum wages, it should be considered that the minimum wage has some assumptions that might not work out in practice or are very difficult to translate efficiently into practice. His conclusion was performed based on multiple analyses on Latin American countries. These difficulties can be:

1. Relationships with the broader wage market: Depending on the local wage systems, the minimum wage can have ripple-effects throughout different sectors of the economy
2. Instability: Eight out of eleven studied Latin American countries experienced a decline in the real minimum wage between 20-70%, and a decline in the ratio of the minimum to the average wage in all but one country. By 1995, the real minimum wage in 12 out of 16 countries was still lower than its 1980 level - in some cases by more than a third
3. Compliance: While the minimum wage guarantees the minimal income, there may be problems with enforcing compliance. There is a problem especially in countries where there is a large proportion of the workforce employed in the informal sector. The ILO also warns that in countries with high non-compliance that this can have negative effects on both the formal economy (high unemployment) but also the informal economy, as it can provide non-compliant firms an illegitimate cost advantage (ILO, n.d.)
4. Urban unemployment: Latin American countries have very segmented labor markets (which are naturally more informal), making it even more important to provide very careful wage policies (Grimshaw and Miozzo, 2003, p. 3-9).

### *Negative side effects of a large informal economy*

Farrel (2004) argues for several negative side-effects of having a large informal economy:

#### 1. Economic

- a. Low-productivity trap: A difficulty to scale growth of an informal company because of a lack of ability to access formal capital markets (and instead being forced to pay higher rates for capital) and because they cannot handle logistics (employment contracts, disputes, supply-chain management) as efficiently as formal companies. Informal companies are incentivized to stay small to continue avoiding taxes and regulations. The author goes on to say that informal companies operate at “just half the average productivity level of formal companies in the same sector and at a small fraction of the productivity of the best companies.” (Farrel, 2004, p. 5)
- b. Curbing formal companies: Ferrel argues that avoiding taxes and regulations gives informal companies an advantage of more than 10% of the final price, giving these companies an unfair advantage over formal companies
- c. Loss of tax revenue: If it is impossible to raise taxes from informal companies, governments must increase taxes on the formal companies, that may lead to a vicious cycle in which the price differentials get exacerbated.

#### 2. Social

- a. Less protection for workers as they are unable to unionize for health and safety protection
- b. Less choice for consumers: A large divergence between formal and informal companies will lead to the consumer having less option for consumer goods. Either the expensive, safe, high-quality goods produced by the formal companies or the cheap, risky low-quality goods produced by the informal companies (Farrel, 2004, p. 5-12).

### **2.3.2 Keynesian perspective**

*Philosophical and Economic basis*

Keynesian economics (based off the economist John Maynard Keynes) is an economic school of thought that believes that the individuals on a microeconomic level follow the guidelines set from a macroeconomic level and that this would yield the best possible results for everyone, because “the state was the institution that has the position, power, and obligation to manage (i.e., minimize, shorten, or avoid) capitalism’s business cycles” (Wolff & Resnick, 2012, p. 21).

Keynesian theory rejects the Neoclassical paradigm of “individualism”, instead promoting a sense of “structuralism”. Believers in Keynesian economics want the state to keep a watchful eye on markets, to maintain readiness to intervene and to manage the inevitable market imperfections and failures. The Keynesians believe that if not for state intervention, market imperfections, imbalances, and the resulting business cycles could persist too long and cause too much damage. Without state intervention, the continued presence either of prolonged inflation or recession could push suffering and frightened citizens to seek the socialist or communist alternatives that both Neoclassical and Keynesian theorists reject (Wolff & Resnick, 2012).

The Keynesians disagree with the Neoclassical “Invisible Hand”-mechanism, saying it either does not work or simply works too slow to be of practical use. Keynes famously wrote that:

In the long run this is probably true ... But the long run is a misleading guide to current affairs. In the long run we are all dead. Economists set themselves too easy, too useless a task if in tempestuous seasons they can only tell us that when the storm is long past the ocean will be flat again. (Keynes, 1923, p. 80)

Keynesian theory’s focus is the overall economy, which is different from Neoclassical theory’s focus on the individual consumer and worker. Thus, Keynesian theory examines major aspects of the macroeconomy such as gross domestic product, national income and wealth, money supply, unemployment, consumer price indexes. Unlike Neoclassical economics, it is not especially interested in individual wants and individual actions (Wolff & Resnick, 2012).

Keynesianism has three core principles according to the International Monetary Fund:

1. The need for a mixed economy guided primarily by the free market, but also partially by government to spur aggregate demand (especially during times of recession)

2. Prices (and especially wages) are considered to be “sticky”, meaning slow to changes in supply and demand, resulting in periodic shortages and surpluses. Because of that stickiness, changes in aggregate demand have a strong effect on real output and employment, not on prices
3. Government spending can increase total output by a multiple of the increase or decrease in spending that caused the change. The reason being is that this increase in spending leads to more disposable income with leads to an increase in total output (Jahan, Mahmud, & Papageorgiou, 2014).

### *Approach to minimum wage*

Keynesianism argues that the so-called “long run” that the proponents of Neoclassical economics is simply too abstract and that in the short-run, there is a need for government policy to correct market imbalances.

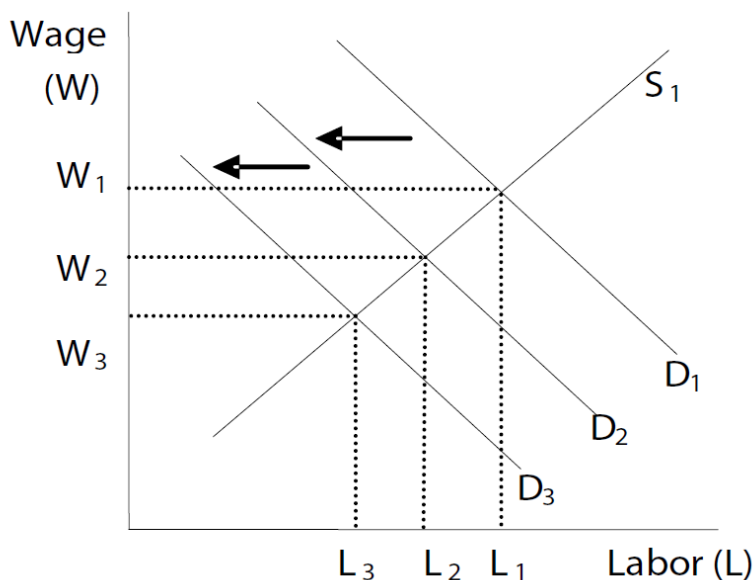
Kaufman (2010) argues primarily for two macroeconomic reasons as to the need for a minimum wage:

1. Imperfect Competition and Inequality of Bargaining Power: Workers suffer an inequality of bargaining power because imperfect labor markets put employers in the dominant position in wage bargaining and the individual worker in a weaker and dependent position. Particularly those with fewer skills, less education, or from disadvantaged gender and ethnic groups
2. Macroeconomic Stability and Full Employment:
  - a. Increase employment by increasing household income and aggregate demand
  - b. Prevent ruinous deflation and destructive competition in the labor market.
    - i. Ruinous deflation: Kaufman argues that wage-deflation (a natural & necessary effect of the Neoclassical model) is likely to increase unemployment, not cure it. There are two steps in this argument:
      - The first is that the macroeconomy suffers a coordination failure due to a “missing institution”. Employees cannot “buy” a job at a lower nominal wage when employers want is a lower real wage. In

practical terms, a money wage cut leads to a price cut, thus causing the real wage to stay the same

- Second, a reduction in wages not only reduces the cost of labor and moves firms down their labor demand curves (toward a new full employment equilibrium) but also reduces income and spending and shifts labor demand curves leftward. The result is to perpetuate and worsen macroeconomic disequilibrium and unemployment.
- ii. Destructive competition: A situation in which wage reductions can lead to more harm by unleashing a destabilizing downward spiral in wages and prices, possibly ending in an economic catastrophe. In this case, employees will be completely squeezed financially by fixed costs as unemployment increases. Employers bid down wages in an increasingly desperate effort to get jobs, which worsens the situation (shown in image below) (Kaufman, 2010, p. 433-442).

*Figure 4: A visual example of how a fall in demand leads to destructive competition.*



*Source: Kaufman, 2010, p. 441*

The Neoclassical argument also relies on the notion that labor productivity (defined as the ratio of real value added at factor cost to total employment) decides wages, which has not held up:

In the long run, raising productivity is the only way to raise living standards, with real wages being the most direct mechanism through which the benefits of productivity growth are transferred to workers. Over the past two decades, however, aggregate labor productivity growth in most OECD countries has decoupled from real median compensation growth. Raising productivity no longer appears to be sufficient to raise real wages for the typical worker, suggesting that there is a role for public policies to support a broader sharing of the benefits of productivity gains in the economy (Schwellnus, Kappeler & Pionnier, 2017, p. 5).

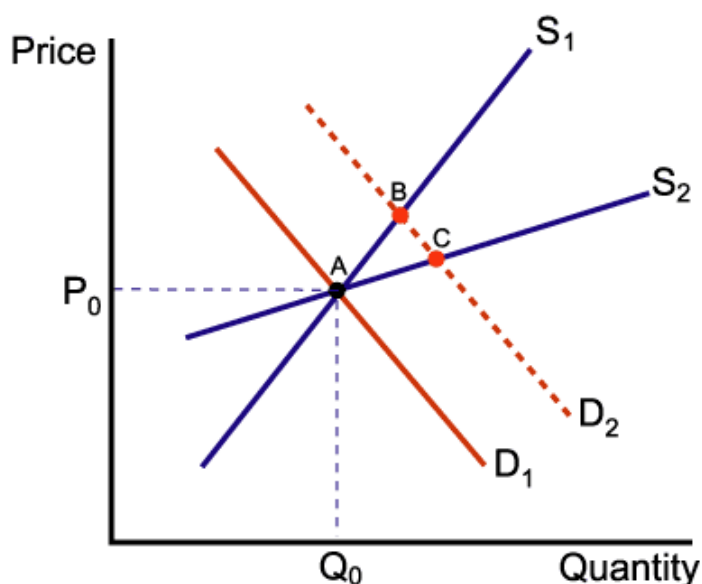
This also seems to be the findings of Van Biesebroeck (2015) in which he states that:

Wages have not grown as rapidly as labor productivity, leading to a decline in the share of national income paid out as labor compensation. Many countries have also experienced growing inequality in the personal distribution income - with incomes increasing much more rapidly at the top than in the middle or at the bottom of the distribution. Such trends can be harmful for social justice and can lead to ‘internal imbalances’ (Biesebroeck, 2015, p. iii).

Van Biesebroeck (2015) argues for a few possible reasons why, unlike the predictions of the standard Neoclassical model, wages and productivity may not automatically grow in tandem:

1. A different labor model: Van Biesebroeck argues for a Neo-Keynesian model in which there is an asymmetric relationship between wages and productivity, especially in a monopsony environment. This model does not assume that labor supply is perfectly inelastic (meaning that a productivity shock will lead to an equal amount of wage increase), while the Neo-Keynesian model argues that a productivity shock will lead to an increase both in wages as well as the level of employment. This means that an increase in productivity might lead to a marginal decrease in wages

Figure 5: Effect of productivity shock on wages ( $P$ ) and employment ( $Q$ )



Source: Van Biesebroeck, 2015, p. 12

2. Homogeneity: Workers are clearly not homogenous and do not earn the same marginal wage. Workers can be grouped into classes in which the groups are viewed separately. Some of these classes can be age, gender, education, etc.
3. Asymmetric information: Van Biesebroeck states that a key theoretical reason for deviating from equality of wages and productivity is the presence of asymmetric information. This can be defined as a “lack of unrestricted and costless flow of information between agents involved in any economic activity” (Kar & Datta, 2014, p. 1). Van Biesebroeck raises two possible reasons for asymmetry:
  - a. Workers that will be more productive in the labor market must also be more productive in the acquisition of education, i.e., they can obtain a degree at lower (study) cost. In that case, higher educated workers will demand a higher wage even if there is no direct link between education and productivity in the workplace. High productivity workers will choose to acquire potentially useless education, merely to distinguish themselves from low productivity types. Firms recognize this and demand and competition for educated workers bids up wages. Low productivity workers on the other hand are unable to do so and get paid less

- b. The assumption that worker effort is not (perfectly) observable. As a result, the employer will not be able to write a contract that makes the wage conditional on productivity or effort.

Kar & Datta (2014) provide additional reasons for the discrepancy between wages and productivity:

- c. Lack of opportunity based on worker characteristics in terms of labor market discrimination, capital market constraints, unfavorable government policies, etc.
  - d. As entrepreneurs have imperfect information about employees' individual ability. The employee, in the beginning, might be offered a wage based on the mean wage for this type of work and thus the wage will not be based off the individual productivity, but on the mean productivity of the reference-point (Kar & Datta, 2014, p. 1-3).
4. Monopsony: Monopsony power on the side of the employer could be another reason for deviations of the wage from the marginal labor productivity. If the firm can dictate wages, it does not necessarily have to pick a wage (price) on its own demand curve but can pick a point on the workers' supply schedule that maximizes the firm's profit. This will only be feasible if workers cannot easily substitute away to competing employers (Van Biesebroeck, 2015, p. 12-17).

The Keynesian also reject the Neoclassical paradigm of fully employment. Neoclassical economists draw the supply/demand function and start their analysis at the equilibrium and assume the market is at a point of full employment (with some positive frictional unemployment). Thus, the Neoclassical model hides the reality of structural involuntary unemployment, which the Keynesian economists consider a normal condition in the aggregate labor market.

The Keynesian model assumes that economic agents, to better reflect reality, are modeled as human beings instead of lifeless cattle (labor being homogeneous). Any (social) failures of the market would be because the economic incentives were not available to suggest that outcome. Thus, persistent involuntary unemployment is logical impossibility in Neoclassical theory (think of Sowell's argument of unemployment of being a "choice"). Keynesians argue that labor is not homogeneous, because the act of entering an employment relationship, by definition, creates a



distinction between “outsiders” and “insiders”, eventually leading to monopsony. Thus, a state of imperfect competition should be the starting point for analyzing the labor market.

### **2.3.3 Fundamental disagreements between both**

Both Neoclassical and Keynesian models agree that, in the long run, that free markets are needed to achieve economic prosperity. Neoclassical economics tends to focus on long-term aggregate supply while Keynesian economics tends to focus on short-term aggregate demand, as short-term aggregate supply is unstable and leads to volatility in the business cycle. Neoclassical economics disagree with the Keynesian focus on spending; they see savings as key to increasing productivity. Savings leads to more entrepreneurial innovation which leads to increasing productivity.

Neoclassical economists believe that the view when proposing economic policy is not “what could go wrong?”, but instead “why could it ever go right?”. The effects of intervention (called the “seen”) always lead to misallocation effects which are “unseen”. The economy is complex, with millions of prices communicating and coordinating information to participants. A distortion of one market has a snow-ball effect on other markets.

The government, at best, is not efficient enough to coordinate something as massive as the economy. At worst, the government operates on a completely different incentive-structure than the “regular” economy. The minimum wage is more of a political tool instead of a sound economic policy.

Murray Rothbard argues regarding government interventionism:

The personnel have no incentive to be efficient. In fact, the skills they will develop will not be the economic skills of production, but political skills — how to fawn on political superiors, how demagogically to attract the electorate, how to wield force most effectively. These skills are very different from the productive ones, and therefore different people will rise to the top in the government from those who succeed in the market (Rothbard, 2004, p. 1260).

Keynesians also argue that labor is not homogeneous (meaning, firms do not compete for labor as they do for customers) and thus is not subject to standard supply/demand rules. Based on those assumptions it deserves its own model which factor in asymmetric information, power inequalities. They criticize the Neoclassical model for denying the existence of persistent involuntary unemployment, assuming that all unemployment is simply by choice. They also argue for instituting a social/behavioral model of the human agent and say that firms may actually maximize profit by paying above-market wages as a deliberate strategy to attract and retain the best workers, because of the positive link between high wages and work effort/cooperation. (Kaufman, 2010). The Neoclassical economists disagree with that idea, stating that employers would voluntarily increase wages above the current market-wage if they felt like that would increase worker productivity.

Neoclassical economists argue against the idea of minimum wage as a tool against monopsony power. Low-skilled workers are likely to have many potential employers since many employers in many industries demand unskilled labor. The Neoclassical view is also skeptical about the idea of a monopsony market, since competitive labor markets would almost surely be arbitrated away if there was large scale wage exploitation. (Lau, 2018)

Lastly, Neoclassical economists realize that every government must make the pragmatic choice of weighing possible risk-reward relationships to achieve the intended reward. But the minimum wage is clearly an example in which it does not even help the ones it wants to help. It fails in its intent and is thus an illogical policy.

### 3. Practicalities of Minimum wage

This chapter goes more in-depth into what factors to consider when setting up the minimum wage, and the distributional effects of that minimum wage.

#### 3.1 Setting a minimum wage

The reasoning for the ILO to consider a minimum wage can be found in the ILO Constitution of 1919, which proclaims the urgency of improving conditions of labor through a variety of measures. One of which is, “the provision of an adequate living wage” (ILO, n.d., p. 8).

Whilst the definition of minimum wages seems clear enough, implementing this within the different countries has not gone easily. There are multiple factors to consider for conceptualizing a minimum wage, some of these are:

1. What level to set:
  - According to Dickens (2015), the minimum wage is set at around half the median wage. But it is also dependent on the cost of goods and services (which can differ substantially between regions within the same country)
2. Structure:
  - Should the minimum wage be an hourly wage (like the United States), or a monthly minimum wage (like Argentina)? There is also a distinction to be made between gross wages, or net wages, depending on tax laws. For example, South Africa, minimum wages vary not only by sector, but also in some cases by occupation and location, resulting in more than 36 different minimum wages
3. Capacity for employers to pay:
  - According to the US Bureau of Labor Statistics, the most common place for minimum wage earners is in the retail and restaurant-sector and according to the NYU Stern School of Business the net profit margins for Retail (Grocery & Food)

is 1.44% and Restaurant/Dining is 10.57%. Employers in highly competitive industries have very little profit margin to provide an increase in wages, especially if their total workforce contains a relatively large portion of low-wage earners

4. Who should qualify:

- There can be sectoral or occupational differences depending on the needs of the employees. There are other variables to consider such as age, gender, education level

5. To what to peg it to:

- Some countries adjust the minimum wage depending on the level of inflation (as measured by the CPI- or the PCE-index), insuring the same standard of living. Other examples, such as the Australian Council of Trade Unions (ACTU, 2018) have argued for the minimum wage to be adjusted according to the national median wage, to help mitigate widening income inequality

6. Frequency of adjustment:

- Should the minimum wage be adjusted annually or semi-annually? Should it depend on the level of inflation? There can be periods of little economic growth (theoretically little need to adjust the minimum wage), and short periods of hyperinflation (theoretically a lot of need to adjust the minimum wage)

7. What stakeholders to consider:

- Typically, this would include those most directly involved, such as the government's labor department (local, national, or even supranational), labor unions, heads of businesses

8. Compliance:

- Borat, Kanbur, & Stanwix (2019) have argued that despite the lack of consensus in minimum wage research, the literature broadly agrees that enforcement of and compliance with minimum wage laws are low in most developing countries. Thus, it is not generally a lack of labor regulation that is of concern, but rather a lack of compliance with existing regulations because of imperfect enforcement

9. Effects on the supply/demand function of labor:

- These are among the topics discussed in-depth affecting the supply/demand of labor

The more factors legislation needs to consider, the more complicated it tends to become. H. Beales, et al (2017) argue that the basic result of regulation should be “more good than harm” and that poorly designed regulations may stifle innovation, growth, and job creation; waste limited resources; undermine sustainable development; inadvertently harm the people they are supposed to protect; and erode the public’s confidence in our government. He gives four possible reasons for this:

1. Emphasis from profit seeking to rent seeking: Profit seeking is a non-zero-sum game in which entrepreneurs participate in creative destruction to provide efficient products. Rent-seeking is (at best) a zero-sum-game in which talent, energy and resources get channeled into favorable government treatment instead of innovation that leads to growth and prosperity
2. Hijacked laws: Regulatory programs can be captured by businesses and other so-called “interest groups” who use them to promote their own ends, such as restricting competition and suppressing innovation from new firms or advancing their market power or political agendas. Even well-intended regulations can produce unintended negative consequences.
3. The hidden cost: The costs of regulation are passed to those who are unaware of these costs because they are hidden in lower wages, higher prices and fewer products and opportunities made available
4. The inflexibility of bureaucracy: The larger and more competitive an economy becomes, the more stress it puts on entrepreneurs to evolve to meet consumers’ needs. As regulatory responsibilities accumulate, cumulatively, they can hinder the flow of innovation and economic growth (H. Beales, et al, 2017, p. 11).

### **3.2 Minimum wages in the region**

Although the data is limited to between 2008-2011, using ILO data to look at minimum wage data for 30 countries in the region (Latin America and the Caribbean) presents patterns. All countries have some type of minimum wage. Only Guatemala and Guyana have sectoral minimum wages, no national minimum wage. Most countries use a tripartite commission of government officials, private sector representatives and worker representatives to come to an

agreement in setting the minimum wages, although the decision ultimately lies with the minister of labor. The countries in which there is no formal consultation with partners are Bolivia, Brazil, Dominican Republic. All 30 have varying degrees of coverage, taking account sectoral differences and complexity of work, age. Chile has a separate minimum wage for workers below 18 & above 65, and those between 18 and 65. There are no rules specifically targeting women over men, or vice-versa.

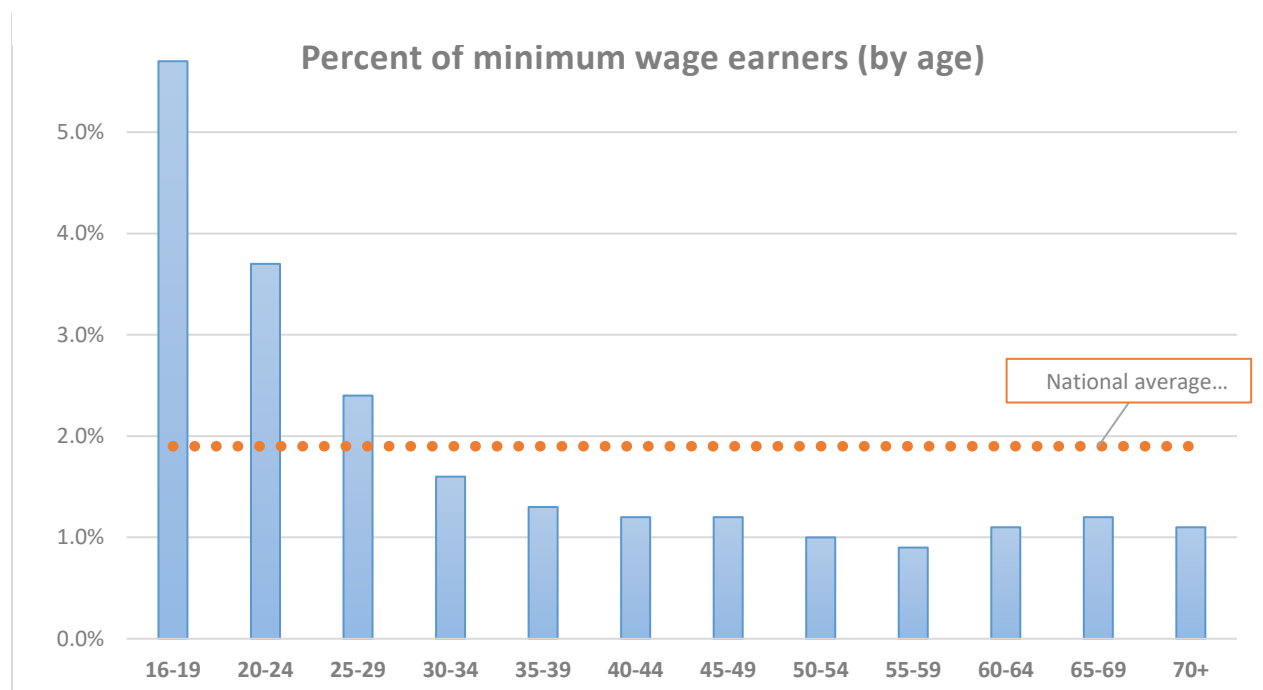
Mexico, with 86 minimum wages, has the most out of all the countries, followed by Nicaragua with 18. Most countries consider similar living categorical expenses that a minimum wage should cover; needs such as family expenses, nutrition, housing, education, clothing, sanitation, transportation, recreation and 8 out of the available 24 countries formally consider inflation. Most countries do not formally consider employer capacity to pay to calculate the minimum wage (only Columbia, Dominican Republic, Guatemala, Honduras, Jamaica, Peru). Cuba explicitly considers the communist view of “to each according to his ability, to each according to his work” and explicitly states that employers are not consulted when considering the minimum wage. Adjustments are made in a variety of ways, with Argentina, Guyana and Trinidad and Tobago adjusting whenever the government sees fit. Honduras adjusts the minimum wage annually and can even adjust it mid-year if inflation reaches 12%. All countries formally enforce the minimum wages with labor inspection and fines, although Antigua and Barbuda has no specified amount. Trinidad and Tobago is unique in that it offers a fine including interest payable to the employee. Mexico has the highest penalties, with a fine of up to 200 times the amount owed to the employee.

### **3.3 Demographics of minimum wage earners**

Because developing countries have different minimum-wage enforcement rates (and less data) than developed countries, it is difficult to find accurate demographics of the minimum wage. While the demographics of the developed countries are not equal to those of developed countries because of differences in the labor market, it is certainly worth looking at. The following are highlighted data from the U.S. Bureau of Labor Statistics, 2019:

**Age:** There is a clear separation between age, in both absolute and relative terms. Workers under 25 are around 20% of hourly paid workers yet make up about 40% of those paid the minimum wage.

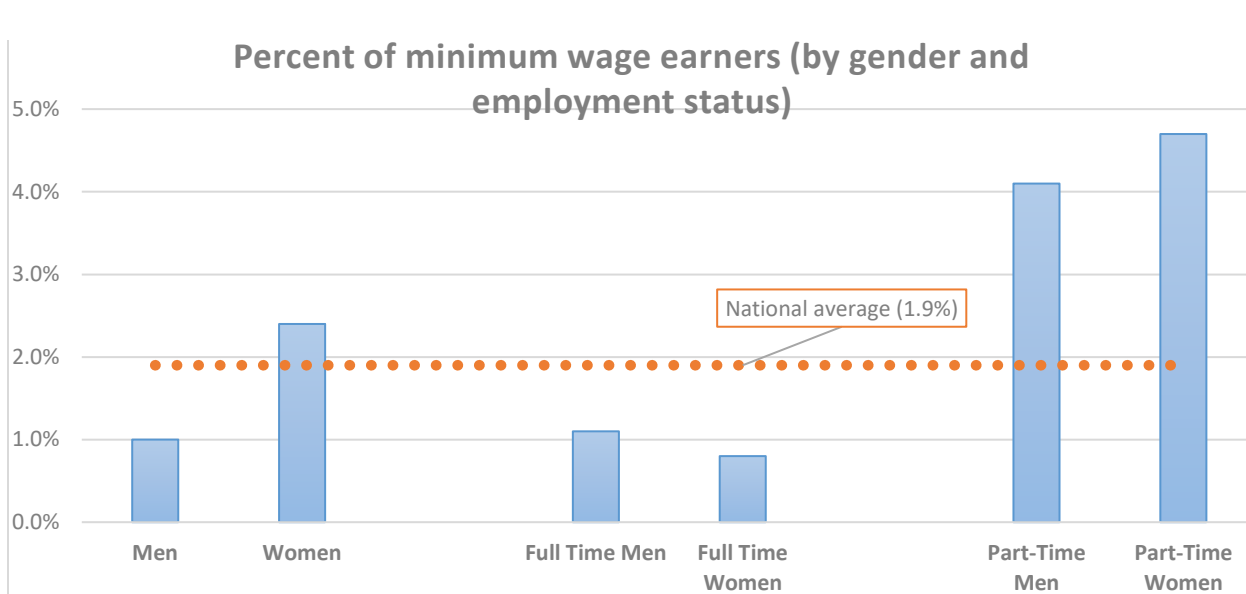
Figure 6: Percent of Minimum Wage Earners (by age)



Source: U.S. Bureau of Labor Statistics, 2020, report 1085

**Gender and Employment Status:** Another important distinction is between these two categories. The data says that part-time workers, in aggregate, are more than 4 times as likely to earn at or below the minimum wage.

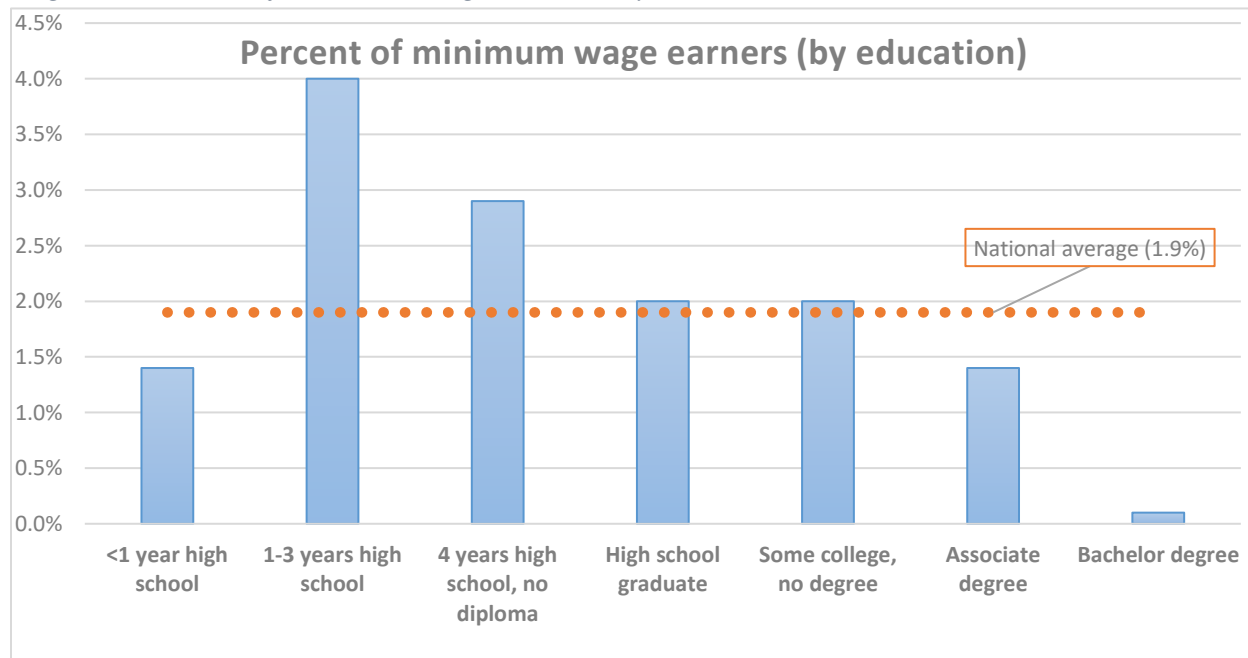
Figure 7: Percent of Minimum wage Earners (by gender and employment status)



Source: U.S. Bureau of Labor Statistics, 2020, report 1085

**Education level:** The data shows that high school graduates (1.8%) are much less likely to be earning minimum wage, as opposed to dropouts (3.1%).

Figure 8: Percent of Minimum Wage Earners (by education)

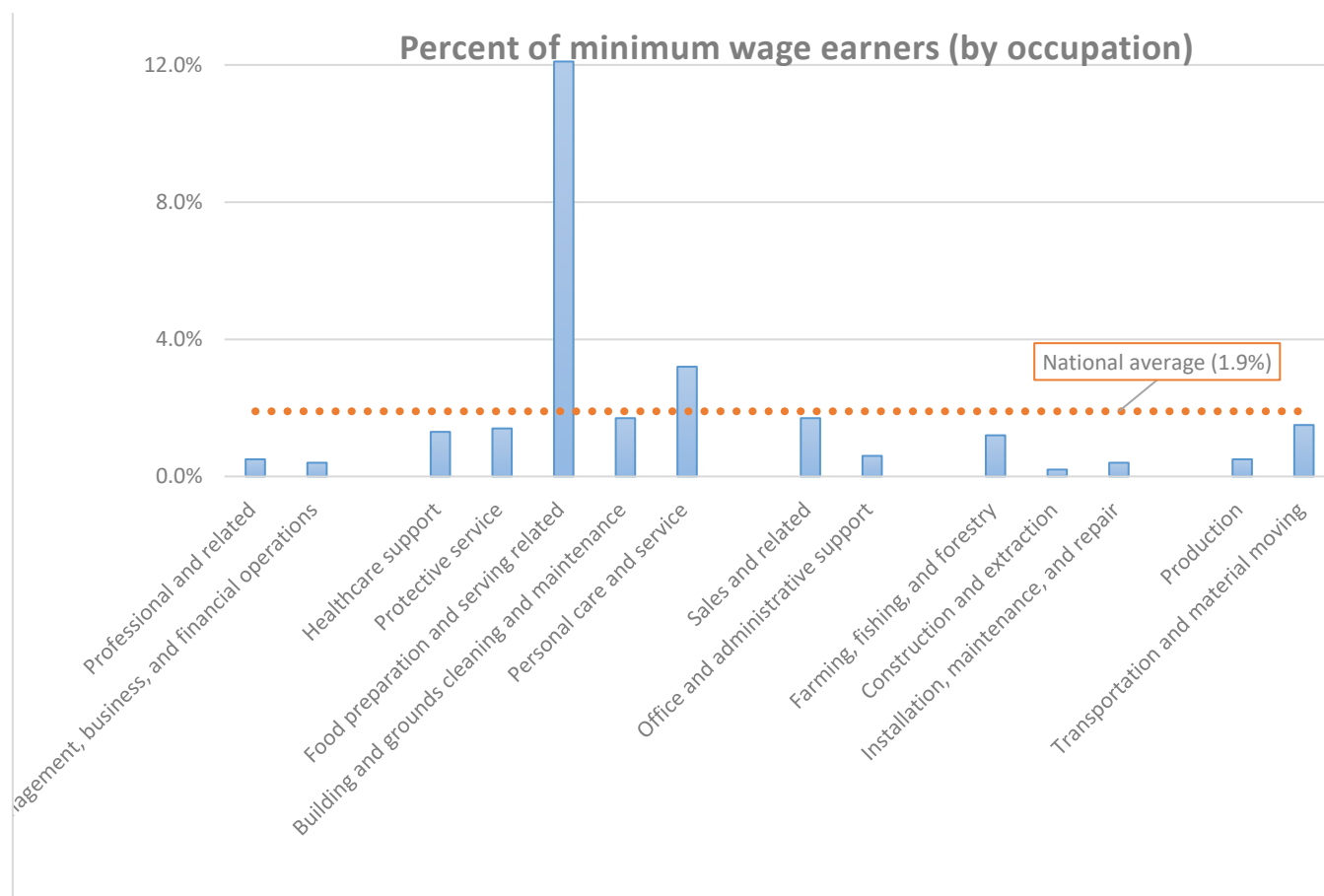


Source: U.S. Bureau of Labor Statistics, 2020, report 1085



**Occupation:** Interesting to note is that of all 1.6 million cases of workers earning at or below the minimum wage, about 55% of them are in the category “Food preparation and serving related”.

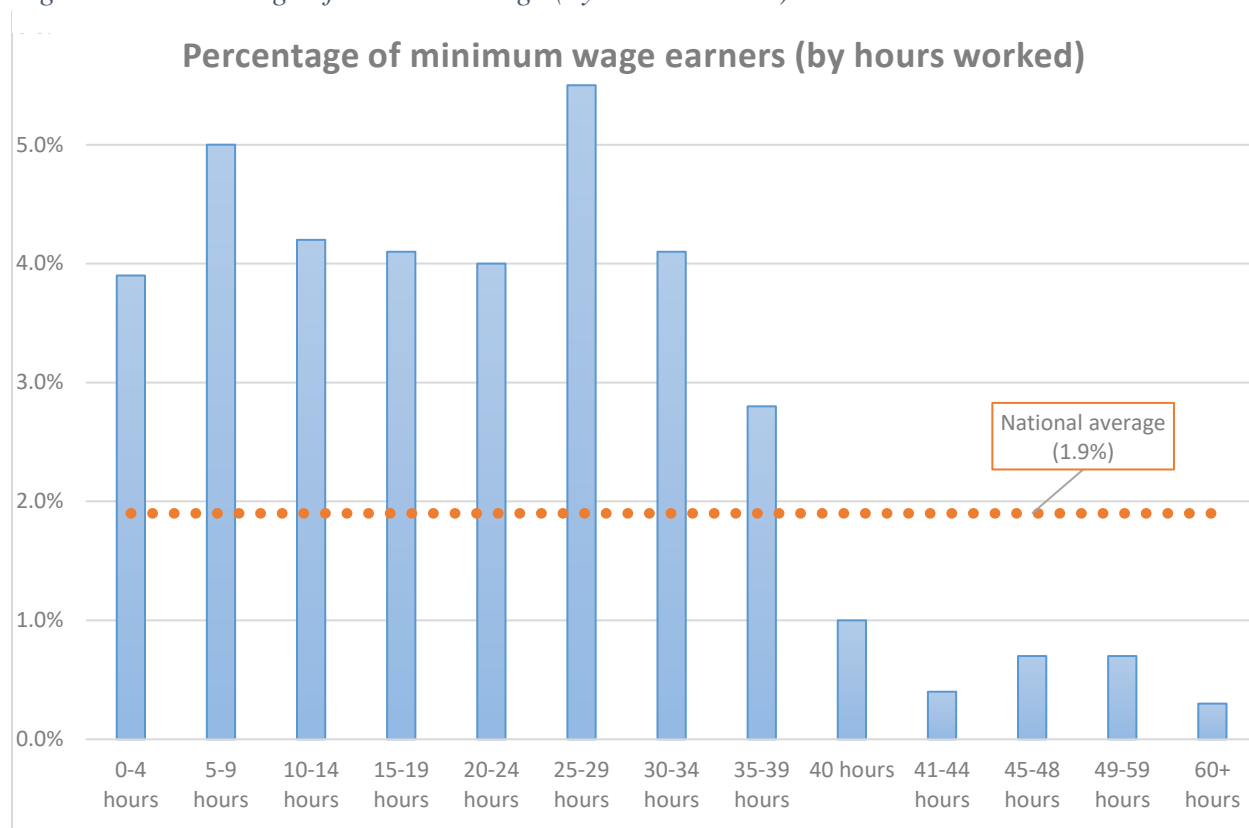
Figure 9: Percent of Minimum Wage Earners (by occupation)



Source: U.S. Bureau of Labor Statistics, 2020, report 1085

**Hours Distribution:** In terms of likelihood to be earning the minimum wage, there is a significant different between those working less and more than 40 hours per week.

Figure 10: Percentage of Minimum Wage (by hours worked)



Source: U.S. Bureau of Labor Statistics, 2020, report 1085

## 4. Empirical Studies

In this chapter the scientific body of minimum wage studies are researched to find the best possible evidence portraying both sides of the economic spectrum.

### 4.1 In favor of the Neoclassical view

Jardim et al (2017) conducted a research for the National Bureau of Economic Research, in which Seattle increased the minimum hourly wage from \$9.47 to \$11 in 2015 and again to \$13 in 2016.

The conclusion was that employment losses associated with the wage increases were large enough to have resulted in net reductions in payroll expenses – and total employee earnings – in the low-wage job market” (Jardim, et al, p. 3). Notable in this paper was that the definition of “low wage industries” was not limited to exclusively the restaurant-sector, or to a particular group of people (mostly teenagers), but on all categories of low-wage employees, spanning all industries instead of examining industries that employ higher concentrations of low-wage labor or by restricting the analysis to teenagers. They did so by utilizing data collected for purposes of administering unemployment insurance by Washington’s Employment Security Department (ESD). The paper demonstrated that such strategies likely misstate the true impact of minimum wage policies on opportunities for low-skilled workers. Their findings of zero impact on headcount employment in the restaurant industry echo many prior studies. Their findings also demonstrate, however, that this estimation strategy yields results starkly different from methods based on direct analysis of low-wage employment. Their preferred estimates suggest that the Seattle Minimum Wage Ordinance caused hours worked by low-skilled workers (i.e., those earning under \$19 per hour) to fall by 9.4% during the three quarters when the minimum wage was \$13 per hour, resulting in a loss of 3.5 million hours worked per calendar quarter. Alternative estimates show the number of low-wage jobs declined by 6.8%. Their estimates

suggested that the rise from \$9.47 to \$11 produced disemployment effects that approximately offset wage effects, with elasticity estimates around -1. The following increase to \$13 yielded more substantial disemployment effects, with net elasticity estimates closer to -3.

These effects are not only apparent in low-skilled jobs but also in younger workers. Kalenkoski argues that the negative effect of minimum wages on employment in the US has been consistent over time, with a statistically significant negative effect on workers under the age of 24 during the observed period of 1996-2011. An increase in the minimum wage of 10% resulted in a 7.4-10.5% decrease in employment of teenagers (19 and younger) and a 2.9-3.8% decrease for young adults (under the age of 24).

In 2012, the Cato Institute published an analysis in which author Mark Wilson referenced the report by the Congressional Joint Economic Committee, reviewing of 50 years of academic research on the minimum wage in 1995. The study found a wide range of direct and indirect effects of increased minimum wages that may occur. These include:

1. Increasing the likelihood and duration of unemployment for low-wage workers, particularly during economic downturns
2. Encouraging employers to cut worker training
3. Increasing job turnover
4. Discouraging part-time work and reducing school attendance
5. Driving workers into uncovered jobs, thus reducing wages in those sectors
6. Encouraging employers to cut back on fringe benefits
7. Encouraging employers to install laborsaving devices
8. Increasing inflationary pressure
9. Increasing teenage crime rates because of higher unemployment
10. Encouraging employers to hire illegal aliens (Wilson, 2012, p. 8).

The most significant is arguably inflationary pressures. Lemos (2004) argued that low wage firms are too small and too competitive to let the employers absorb the cost of a rising minimum wage and are thus forced to pass the additional cost to consumers. She did a comparison of around twenty price effect studies of the US minimum wage (using various methodologies). Her conclusion was that “despite the different methodologies, data periods and data sources, most studies found that a 10% US minimum wage increase raises food prices by no more than 4% and

overall prices by no more than 0.4%” (Lemos, p. 13). This adds weight to the Cato Institute suggesting that employers will try to find ways to offset the additional labor costs.

Strobl and Walsh (2003) researched the effects of minimum wage in Trinidad and Tobago. Knowing there is a large informal sector in Trinidad and Tobago, their research was mainly focused on the effects on compliance and not on unemployment. They concluded that men affected by the minimum wage had a 0.09 higher chance of being unemployed, with large spikes in female unemployment in large firms and no effect for women in small firms. Their conclusion was also that “regulation may hinder some firms from reaching their optimal size by creating the incentive to remain small in order to be unregulated” (Strobl & Walsh, 2003, p. 21).

In 2006, Neumark & Wascher from the National Bureau of Economic Research (NBER) also did a large-scale review of the available minimum-wage literature but divided their comments to specific countries instead of providing one general, collective opinion.

Their conclusion was that a sizable majority of the studies surveyed in this monograph give a relatively consistent (although not always statistically significant) indication of negative employment effects of minimum wages. In addition, among the papers they viewed as providing the most credible evidence, almost all point to negative employment effects, both for the United States as well as for many other countries. Two other important conclusions emerge from their review. First, they see very few – if any – studies that provide convincing evidence of positive employment effects of minimum wages, especially from those studies that focus on the broader groups (rather than a narrow industry) for which the competitive model predicts disemployment effects. Second, the studies that focus on the least-skilled groups provide relatively overwhelming evidence of stronger disemployment effects for these groups.

Neumark & Wascher’s review of the available Latin American research does contain some inherent problems. The analysis of minimum wage effects in developing countries is complicated by several factors.

1. There is often a large informal sector in which minimum wages (and other labor laws) do not apply or are not enforced, and to which there can be substantial spillovers from the formal sector

2. Even in the formal sector, there are serious concerns about the enforcement of and compliance with minimum wage laws
3. In some countries, wages are susceptible to foreign, third-party influences which aren't inherent to a typical labor market. An example would be anti-sweatshop campaigns in which companies are pressured into paying higher wages, forcing them to become less competitive
4. In some cases minimum wage increases have occurred in the context of high inflation, in which case legislated minimum wage increases may convey little more than extraordinarily short-term changes in relative prices of different kinds of labor (Neumark & Wascher, 2013, p. 106).

Because of these complications, the results from developing countries are more difficult to interpret and are less likely to be applicable to other countries. In addition, after reviewing the literature, it seemed to use that many of the complexities involved in thinking about the evidence for each country were better left to scholars of those countries' economies.

### *Brazil*

Minimum wages in Brazil were originally set on the regional level but switched to a national minimum wage in 1984. They argue that while the minimum wage has seen different iterations (sharp increases, fixed wages, and paired with inflation), the real value has been declining over time.

When looking at the distribution of effects, Neumark and Wascher used data from the Brazilian Monthly Employment Survey, 1996-2001 and found a statistically significant correlation of -0.07 for household heads. Interesting though was that there were positive effects on employment and hours on other household members. The implication is that as household heads (who are more likely to work in the formal sector) are less employed, the response is for other family members (who are more likely to work in the informal sector) to work more.

Lemos (2006), who used the same data as Neumark and Wascher also found more negative effects of the minimum wage in low-inflation environments (yet still statistically

insignificant) as opposed to the hyper-inflationary periods from 1980-1994). The implication is that during low-inflationary periods, employers perceive the (nominal) minimum wage to be longer lasting.

Overall, the conclusions from Neumark and Wascher is that the evidence for Brazil suggests that the effects of the minimum wage on employment are small in the aggregate.

However, the evidence sometimes points to unemployment effects where we are more likely to find them—in low-inflation environments, and for less-skilled individuals and particularly lower-wage individuals.

### *Columbia*

The estimated employment effects reported by the authors are large, negative, and statistically significant. In addition, these negative effects are evident in some of the higher locations in the wage distribution, suggesting that the function of the minimum wage also causes employment losses, although it is difficult to understand why this wage rigidity would persist. The lagged effects are also negative and significant, suggesting a period of adjustment. The authors repeat the analysis excluding the dummies for location in the wage distribution to get average effects and calculate an elasticity of employment with respect to the minimum of  $-.15$ . Their conclusion was of the 33 studies "providing the most credible evidence; 28 (85 percent) ... point to negative employment effects" (Neumark & Wascher, 2006, p. 121).

### *Argentina*

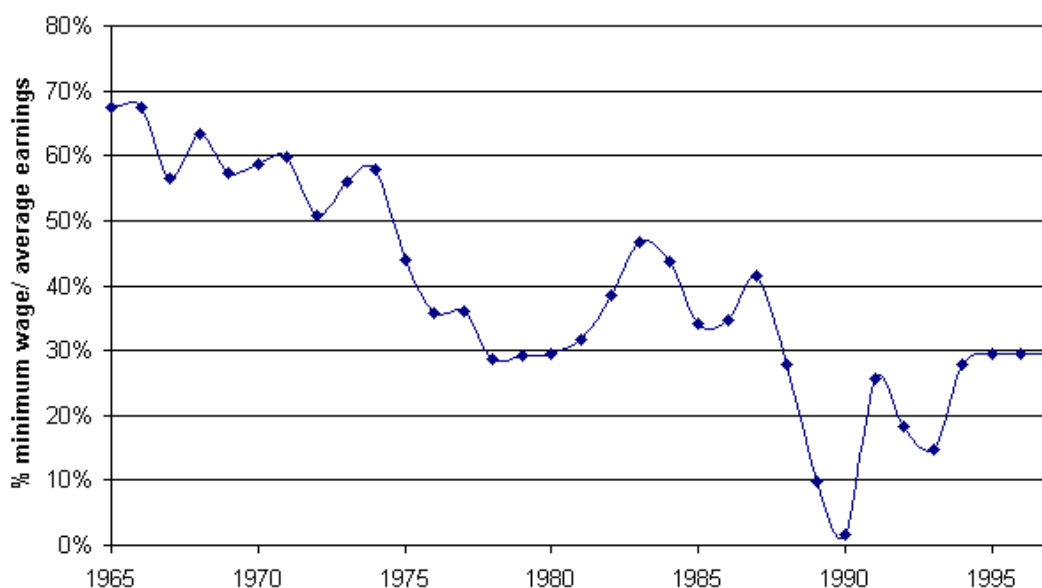
Grimshaw & Miozzo (2003) analyzed the minimum wage data and conducted interviews with officials at the Ministry of Labor and Social Security and with academic experts (Professor Adriana Marshall), and collect documentary evidence from the libraries of the Ministry of Economics and the Ministry of Labor and Social Security.

Argentina introduced a national minimum wage in 1964, in which they defined the minimum wage as “the minimum wage as sufficient to provide for adequate nutrition, proper housing,

education, clothing, health, transport and entertainment, holidays and insurance” (Grimshaw & Miozzo, 2003, p. 19). It is a monthly wage, for a maximum of 192 hours per month, applied to all workers over the age of 18 years old, but excludes domestic services workers and those working in provincial and municipal government. High inflation has caused collapse of the minimum wage in real terms since 1974, making it irrelevant to index wages in the modern labor market. The authors noted six key phases in categorizing the trend of real minimum wages:

1. 1964-1975: Low variation, a lot of stability
2. 1975-1976: The hyperinflationary period in which the minimum wage fell by 82%
3. 1976-1989: Slow and positive growth in the minimum wage
4. 1989-1990: A return to hyperinflation and a consequent decrease in the real minimum
5. 1990-1993: Partial readjustments during a low-inflationary environment
6. 1993-recently: After pegging the  $\text{\$}$  to the USD, a minimum wage of  $\text{\$}200$  was established. This provided stability but was still a lower level than the late-80’s (Grimshaw and Miozzo, 2003, p. 20)
7. Present: Comparing the latest minimum wage ( $\text{\$} 8060$ ) with the latest average earnings ( $\text{\$} 45.200$ ), the ratio is 17.8%.

*Figure 11: Minimum wage as a ratio of salaried workers' average earnings in Argentina*



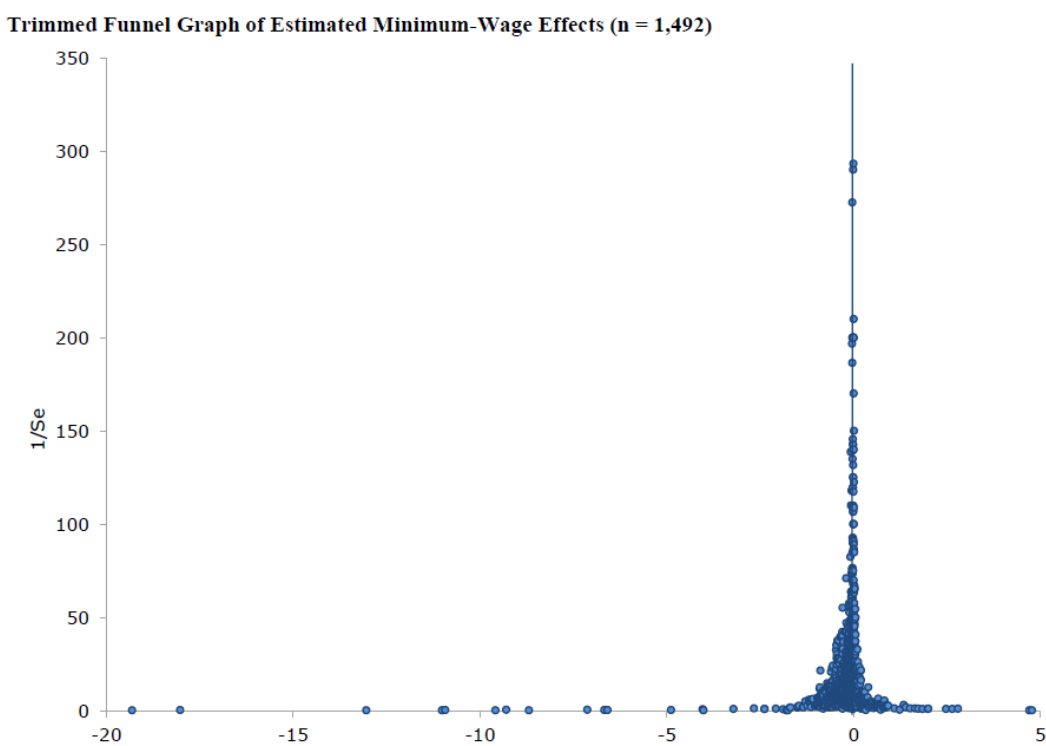
*Source: Grimshaw and Miozzo, 2003, p. 20*



## 4.2 In favor of the Keynesian view

Doucouliafos & Stanley (2009) conducted a meta-analysis of 64 United States minimum-wage studies published between 1972-2007 measuring the impact of minimum wages on teenage employment. This meta-analysis contained almost 1500 studies and showed the results might be skewed slightly towards disemployment effects; an overwhelming majority of the results were clustered around zero employment effects. Their conclusion was that “First, minimum wages may simply have no effect on employment... Second, minimum-wage effects might exist, but they may be too difficult to detect and/or are very small” (Doucouliafos & Stanley, 2009, p. 422).

Figure 12: Trimmed Funnel Graph of Estimated Minimum Wage Effects ( $n = 1,492$ )



Source: Doucouliafos & Stanley, 2009

### *Indonesia*

Rama (1996) did research for The World Bank and analyzed the effects of the significant increases in the minimum wage in Indonesia on employment. Minimum wages tripled in nominal terms and doubled in real terms in the 1990s and his conclusions were that “the results of the empirical analysis in this paper indicate minimum wage effects are quite moderate in Indonesia, and for some provinces and groups of workers these clusters are hardly visible” (Rama, 1996, p. 33).

### *Mexico*

Like Argentina, real minimum wages in Mexico had fallen sharply from 1981-1987. The study referenced comes from Bell (1997), gathering data from Mexico’s Annual Industrial Survey from 1984-1990. This dataset contains around 20% of the total formal employment sector, about 2533 firms, broken down by skilled and unskilled labor. Their conclusion of the minimum wage research was that it “seems to provide reliable evidence that the reductions in the minimum wage in Mexico increased employment of women and had little impact on men, consistent with overall disemployment effects” (Neumark & Wascher, 2006, p. 111).

### *Brazil*

The main policy implication deriving from our findings is that the minimum wage could be an effective policy tool in the fight against poverty and inequality without destroying too many jobs in Brazil. The minimum wage is effective not only in the formal, but also in the informal sector, where legislation is presumably not complied with. It might thus be a more effective policy to reduce poverty than policies that attempt to incorporate informal sector workers into the formal sector, which might generate higher unemployment. Minimum wage policy could then be complemented by other policies specifically targeted at the 10% poorest, as the minimum wage does not reach those at the very bottom of the informal sector wage distribution. A further related policy implication is that minimum wage hikes might adversely affect public deficits in the

longer term (via the public sector wage bill and the benefits and pensions bill), undermining the fight against poverty and inequality (Lemos, 2006).

## 5. Suriname and minimum wage

This chapter gives a brief explanation of the Surinamese minimum wage structure as well as characteristics of the labor market and analyzing macroeconomic factors.

### 5.1 History of the Surinamese minimum wage

Suriname officially introduced its first minimum wage law in 2015 (effective January 1<sup>st</sup>, 2015), becoming the last of the 15 CARICOM-countries to introduce a nationally recognized minimum wage. The author argued that the implementation of a minimum wage has been a national priority since the establishment of the Ministry of Labor in 1970 but for several reasons (mainly private sector resistance, unions, political discord, and lack of political vigor) had not been implemented yet. It provides support alongside other social programs (such as basic health insurance and pension), especially in sectors devoid of unions. The first minimum wage law was to give a yearly increase in the minimum wage from 2015 to 2017. In 2019 a National Wage Council (Nationale Loonraad) was set up as the primary advisor to the Minister of Labor in gauging the effects of the minimum wage and translating social and economic factors to consider when deciding what (if any) actions to take to evaluate and/or adjust the minimum wage. In this council there is a combination of directly involved apolitical and qualified actors in the private and public sector as well as unions.

When deciding the level of the minimum wage, the following had been considered:

- Median/average wages and the standard of living of other groups
- Cost of living
- Welfare benefits
- Economic factors such as productivity and a desire not to increase unemployment (Smith, 2015).

The reasons behind this decision, like many other nations has been to both reduce poverty and reduce income inequality.

The Suriname minimum wage is the minimum gross hourly salary allowed to be paid by an employer to for all forms of labor in the country before taxes and social security. Explicitly excluded from this definition is: overtime, vacation-money, profit-distribution, conditional payments, payments in response to company-related expenses by the employee, end of year bonus or payment to heads of houses. The definition used to the describe the minimum wage was done by the Nationale Commissie Vaststelling Armoedegrens (NCVA) and is the ability to provide basic goods services to lead a humane life. These are: housing, clothing, footwear, access to education, health care, transportation, electricity, and water.

In the case an employer underpays his/her employee, the employee has the right to issue a complaint at the Ministry of Labor without fear of losing his/her job. An employer found guilty of underpaying his/her employee could face between 10-10.000 times the amount owed (minimum of SRD 1.000, and maximum of SRD 100.000). Control measures are predominantly done via visits to firms who are reported to underpay employees.

In addition to the generic minimum wage, there are specific sectoral minimum wages set for three sectors: namely convenience stores (with up to 3 employees), surveillance and horeca (with up to 12 employees). These categories also include workers indirectly working in these sectors through employment agencies. The underlying thought being to provide additional protection for these sectors that are widely recognized for low pay.

The generic minimum wage established in 2015 was SRD 4.29 per hour, which was to be incrementally raised to SRD 5.22 in 2016 and to SRD 6.14 in 2017. On July 10<sup>th</sup>, 2019 this was further adjusted to SRD 8.40 and will last until the end of 2020, after which the Nationale Loonraad will provide analyses for further adjustments. The basis for this wage was taking a basket of basic food items and utilizing the Engel coefficient obtained from the National Bureau of Statistics. The Engel coefficient is based on Engel's law, which states that as income is increased it is proportionately spent less on basic goods and more on luxury goods (the income elasticity of demand of food is between 0 and 1).

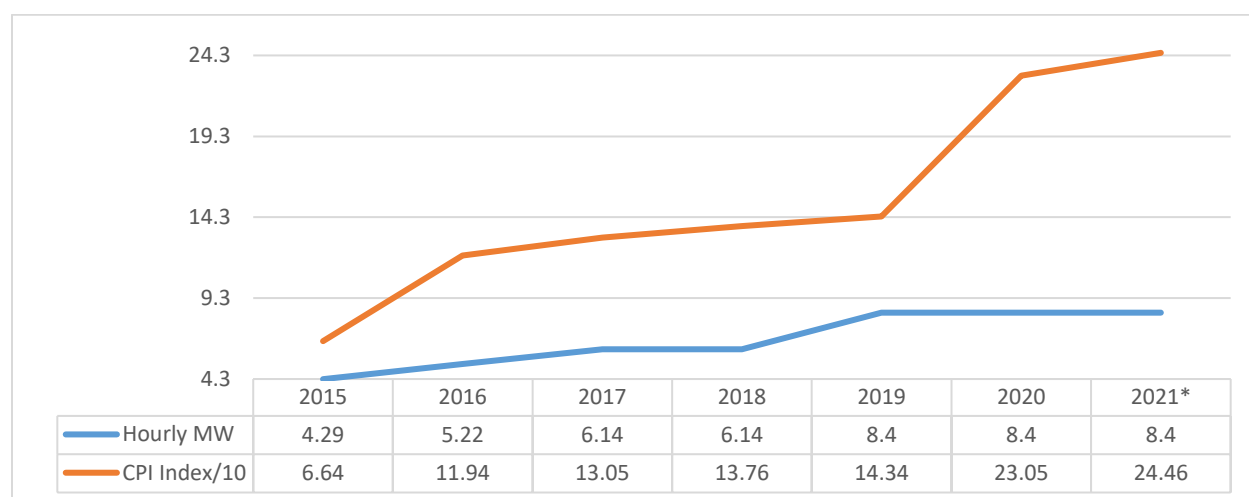
Using data from the Algemeen Bureau voor de Statistiek (ABS, 2020), it is apparent that since 2015, the CPI-index since 2015 has increased from 66.4 to 175.7 in April 2020. That is an inflation-increase of 265%, compared to a minimum wage increase of 195%.

Using the value for calculating real minimum wages:

$$\text{Nominal Minimum wage 2020} / \text{CPI 2020} * \text{CPI 2015}$$

that means, that like many Latin American countries, Suriname has had a (real) decrease in minimum wages since 2015. Real minimum wages as of March 2021 are SRD 2.28 per hour, which is 53% decrease from the initial minimum wage of SRD 4.29 per hour.

*Figure 13: Minimum Wage Increases Compared to CPI Index*



*Sources: Smith, 2015 (minimum wage) & ABS, 2021 (inflation)*

## 5.2 Labor market dynamics

This chapter will feature 2018 labor market data, received from the Algemeen Bureau voor de statistiek. This data source is limited to Paramaribo and Wanica. ABS use a combination of definitions for unemployment which can be found in [Appendix 1](#):

### *Unemployment by Gender*

From the 2018 data, there are 137,059 people employed with 14,277 unemployed (a 10.4% unemployment rate). Of the total male working age population (between 15-64 years), around 6.6% is unemployed, compared to the female working age population in which around 17.7% is unemployed.

*Figure 14: Gender and Unemployment*

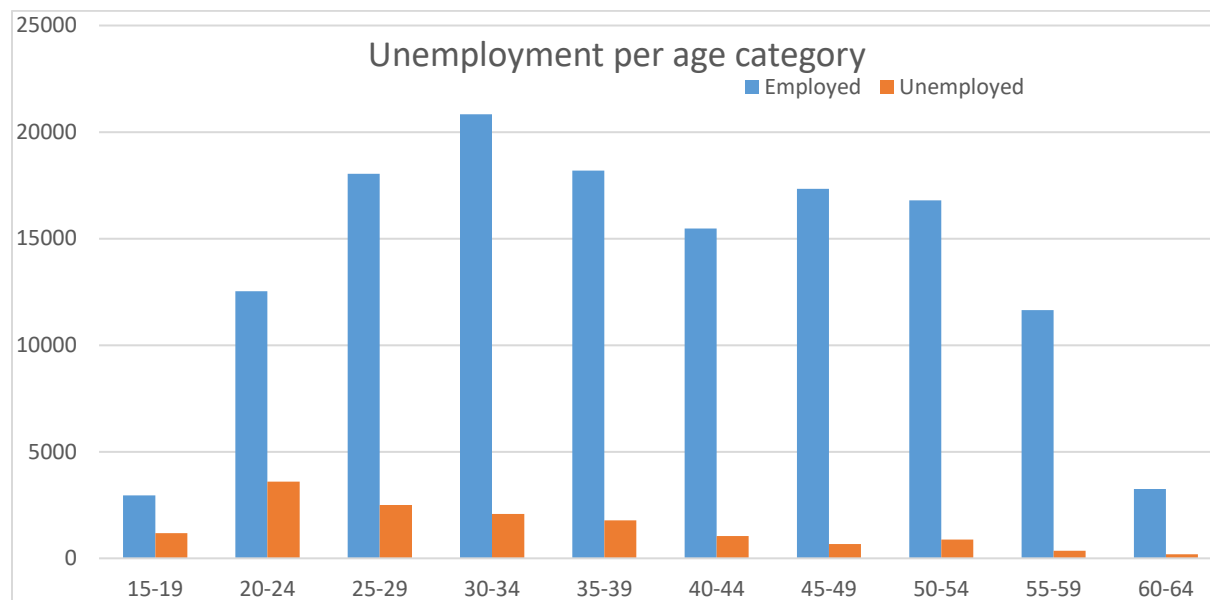


*Source: ABS, 2019*

### *Unemployment by Age*

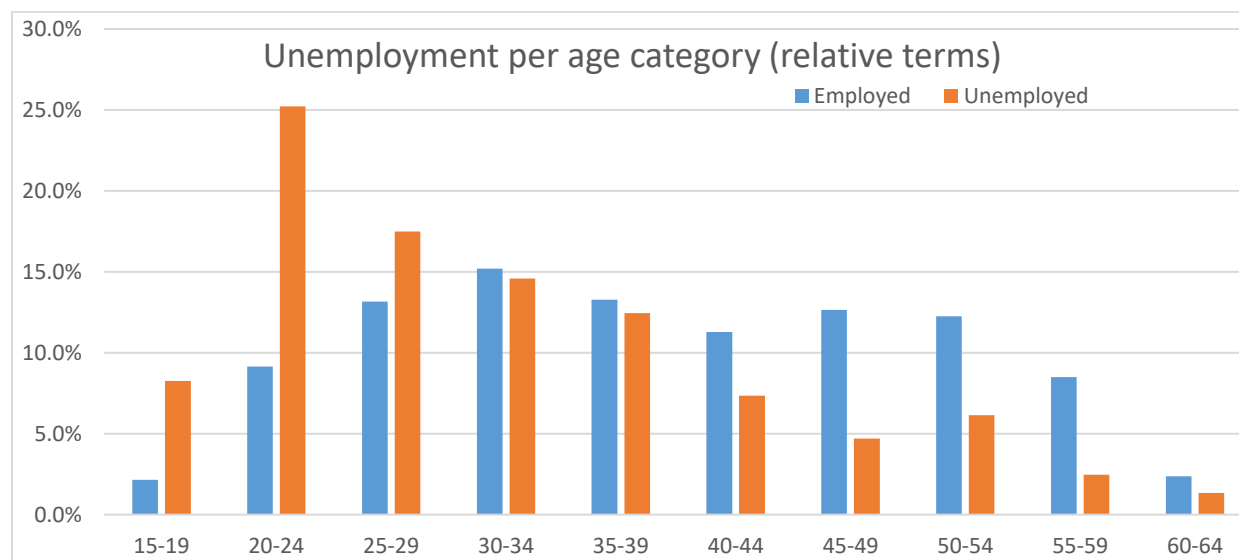
Of the total unemployed population, younger workers are much more likely to be unemployed. Workers under the age of 24 (approximately 4,778) make up around a third (33.5%) of the total unemployed population, despite only making up around 13.4% of the working age population.

Figure 15a: Unemployment by age category (absolute terms)



Source: ABS, 2019

Figure 15b: Unemployment by age category (relative terms)



Source: ABS, 2019

Male unemployment



Male unemployment data is more highly concentrated under the age of 24, with around 35% (1,769) falling in that category.

Figure 16a: Male unemployment (absolute terms)



Source: ABS, 2019

Male unemployment (relative terms)

Figure 16b: Male unemployment (relative terms)



Source: ABS, 2019

### *Female unemployment*

Data for females show that there are more workers between 15-19 that are unemployed (751) than are employed (537). It also shows that around 45.3% of unemployed females are under the age of 35, compared to 57.9% of males.

*Figure 17: Female unemployment (absolute terms)*



*Source: ABS, 2019*

### *Female unemployment (relative terms)*

*Figure 17b: Female unemployment (relative terms)*

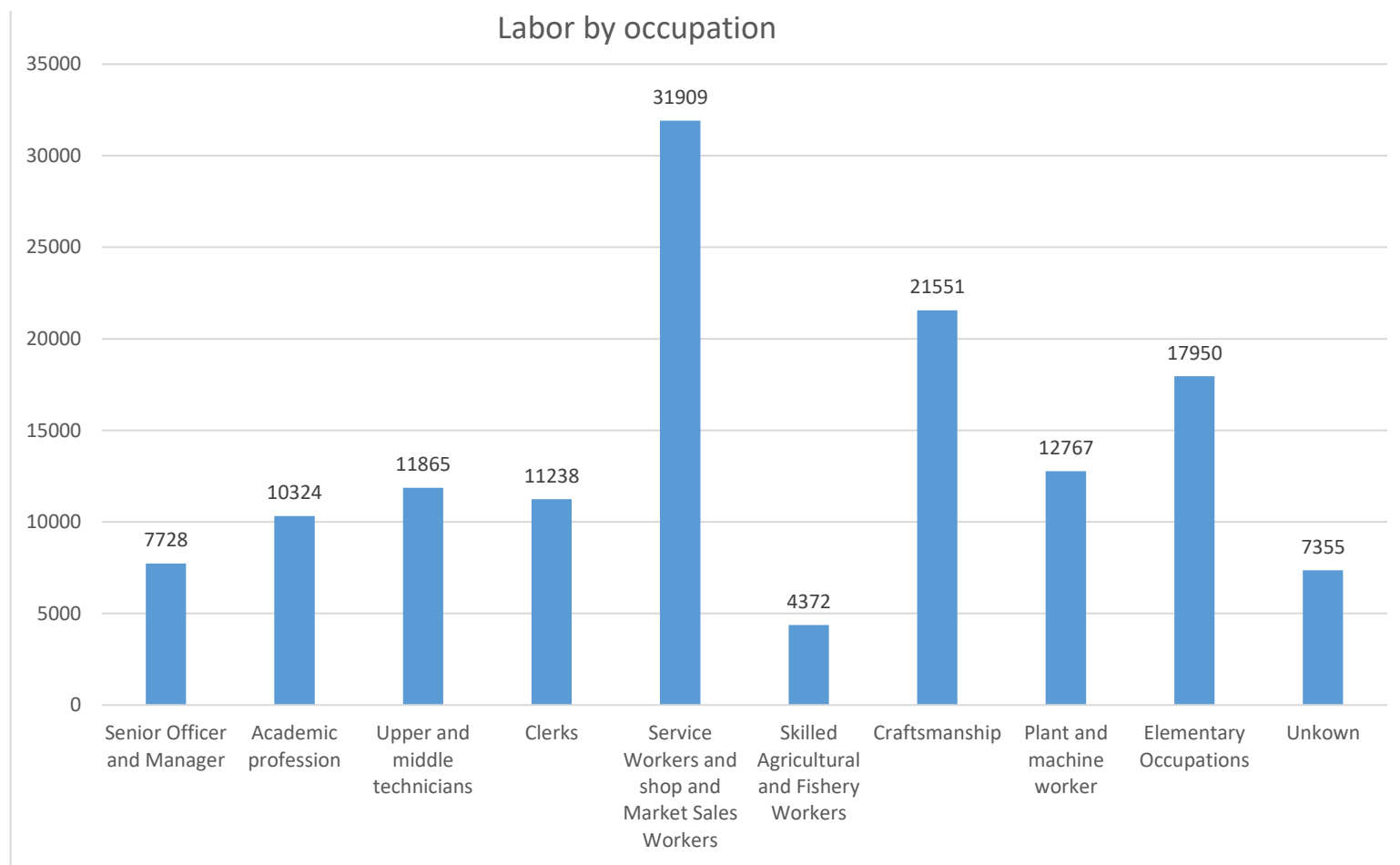


*Source: ABS, 2019*

### *Occupation (absolute terms)*

The most frequent occupations are in the category of basic services (31,909), followed by craftsmanship (21,551).

Figure 18: Labor by occupation

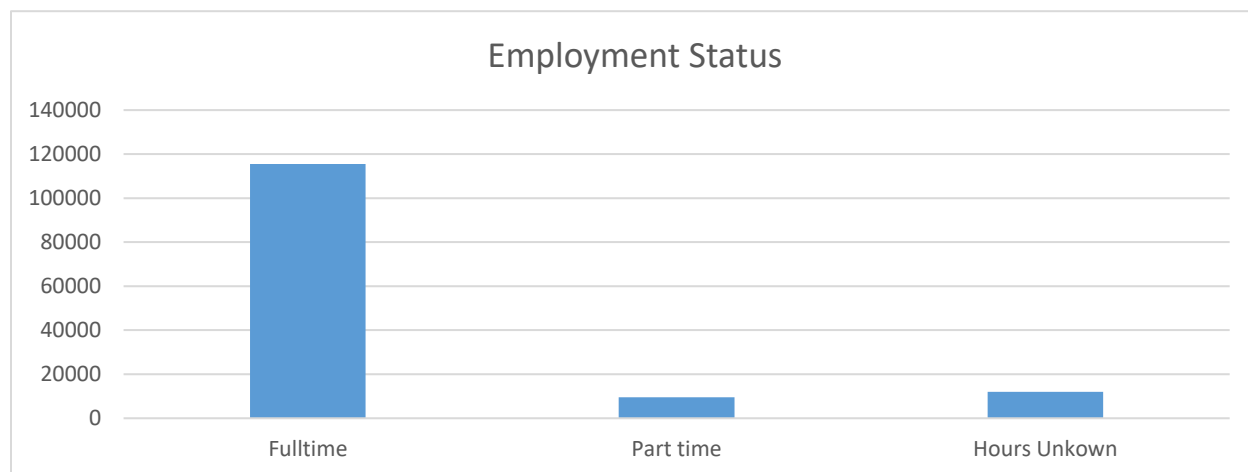


Source: ABS, 2019

### *Employment Status*

There are approximately 12 times as many fulltime workers as there are part time workers, with around 17 times as many full-time male workers as part time male workers. For full time women the ratio is around 9 times relative to part time. When taking full time workers as a group, approximately 63% are male and 37% are female, with part time workers having relatively more women than men (56% and 44% respectively).

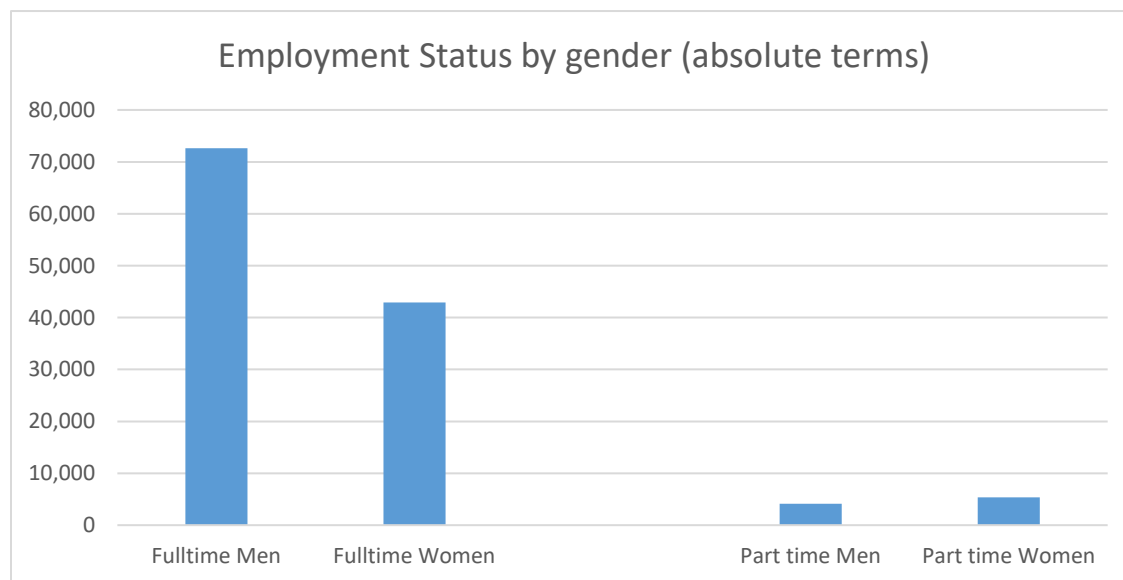
Figure 19: Workers by Employment status



Source: ABS, 2019

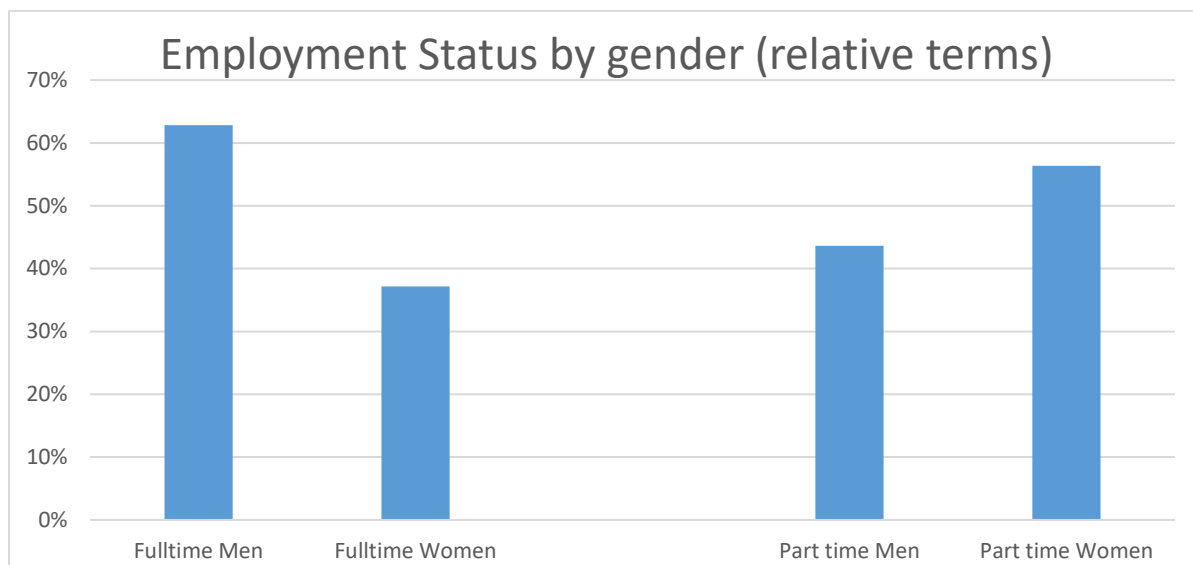
### Employment Status and gender

Figure 20a: Employment Status by Gender (absolute terms)



Source: ABS, 2019

Figure 20b: Employment Status by Gender (relative terms)

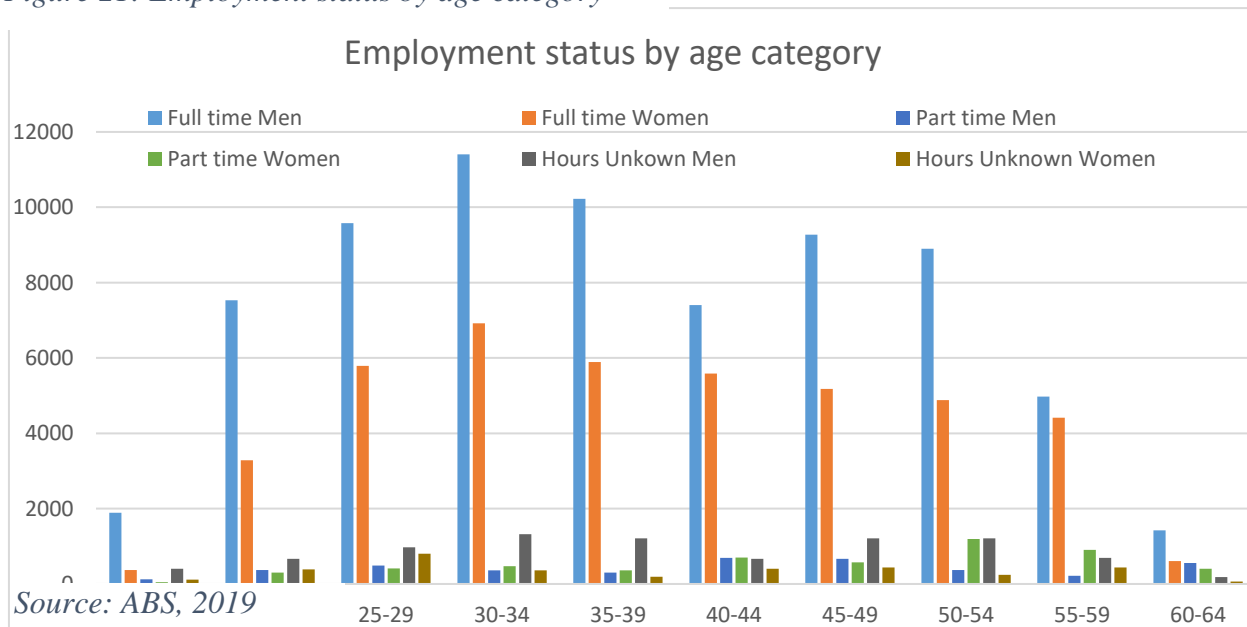


Source: ABS, 2019

Employment status by age grouping

The age category in which most workers fall in is between 30-34 years old, with the lowest being between 15-19 and 60-64.

Figure 21: Employment status by age category

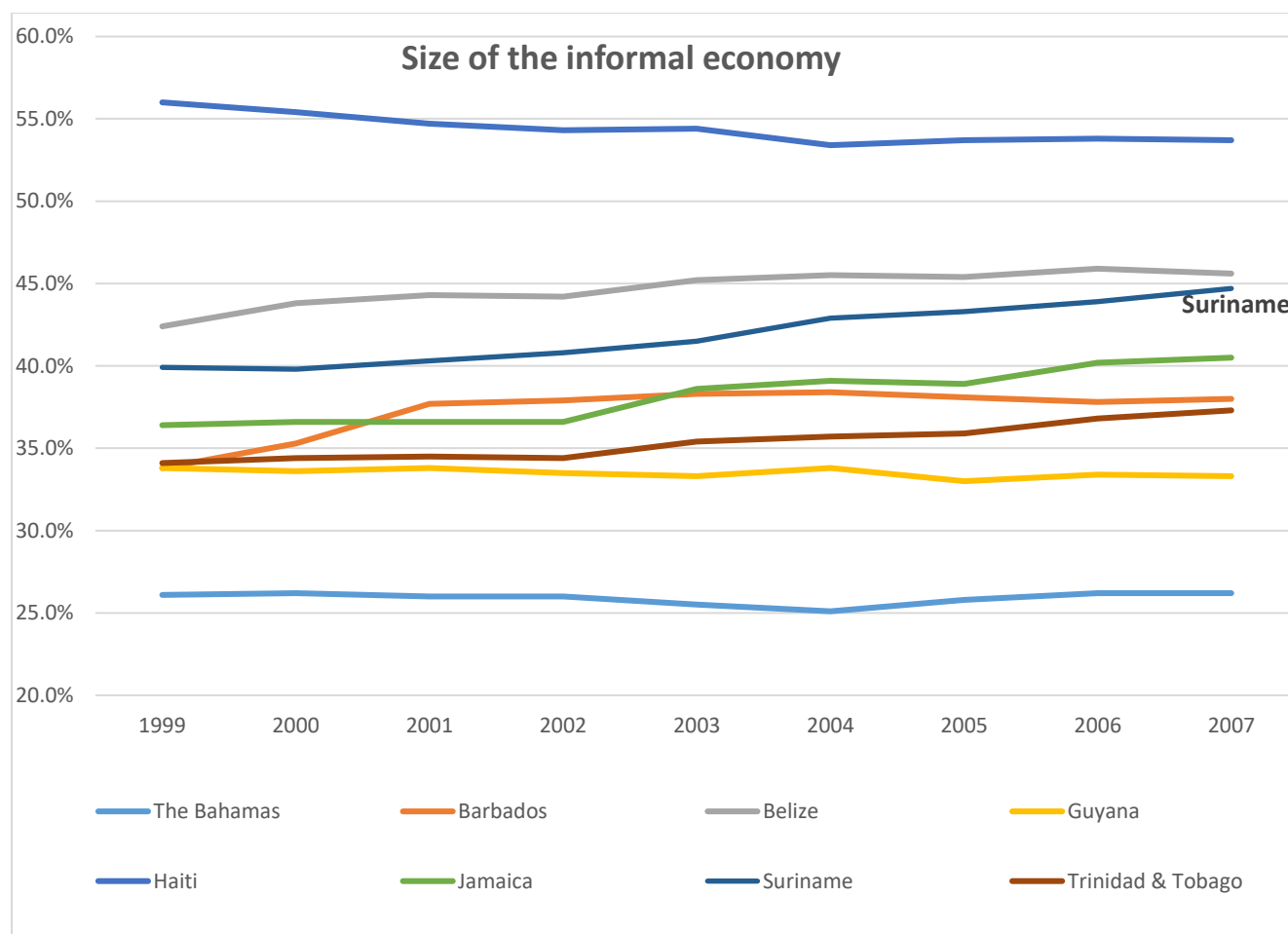


Source: ABS, 2019

### *Size of the informal economy*

According to research done by Peters (2017) from the Inter-American Development Bank, the size of the Suriname's informal economy (defined as "activity that is not reported to the state statistical office") is estimated to be between 35-45% of GDP. The average since 1980 being around 50%, with occasionally (during political and macroeconomic uncertainty) exceeding 200% of GDP. This is higher than the typical South American countries in which the average is between 25-33%. This research also corroborates other findings from Kamau and Lin (2015) (38% informal sector) and Schneider et. al in 2010 (42% informal sector).

*Figure 22 Size of the informal economy (as a percentage of GDP)*



*Source: Peters, 2017, p. 15*

## 5.3 Macroeconomic data

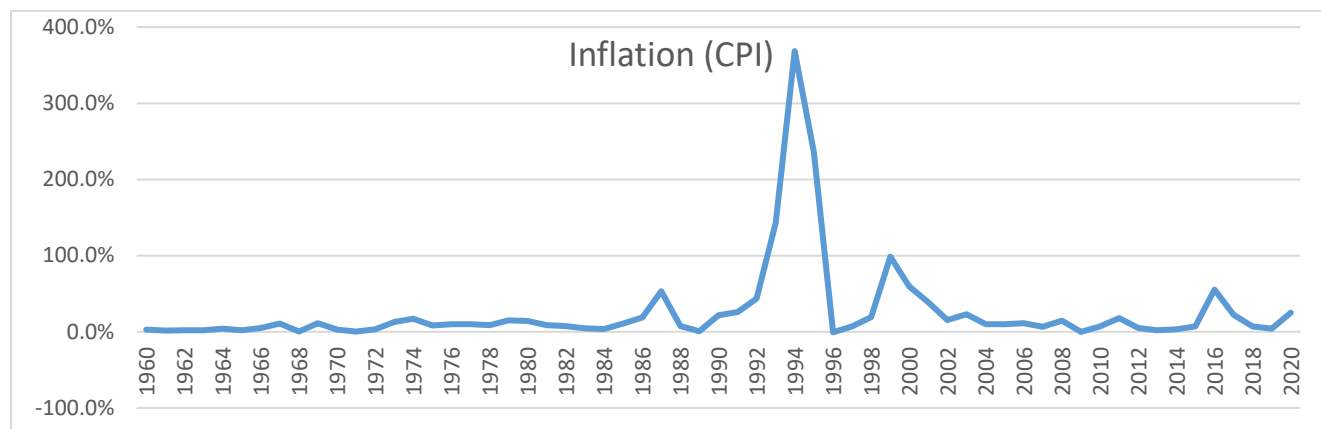
The Surinamese macroeconomic scene is dominated by high inflation, relatively high unemployment, and moderate GDP growth. MacDonald highlighted numerous structural problems in the Surinamese economy in 2017:

1. High dependence on commodity-exports and a failure to diversify: Gold and Oil exports accounted for 90% of foreign exchange earnings and 45% of government revenues in 2017
2. Too much state interventionism: The government employs around 60% of the total workforce
3. Lack of adequate infrastructure: Too little air transport, electricity, and educational infrastructure
4. Failure to develop the private sector: No large private-sector companies and the small-medium sized companies being limited to selling to the government (MacDonald, 2017).

### 5.3.1 Inflation

Using CPI data from both the World Bank and the Algemeen Bureau voor de Statistiek (ABS, 2020), Suriname has had an average yearly inflation of 25.7% since 1961. Excluding the hyperinflationary period from 1993-1995, Suriname has had an average inflation of 14.1%. Over the 20 years (since 2000), there has been an average annual inflation of 16.4%, which is significantly higher than the 5.8% of Latin America and the Caribbean over that same period.

Figure 23a: Suriname yearly CPI data

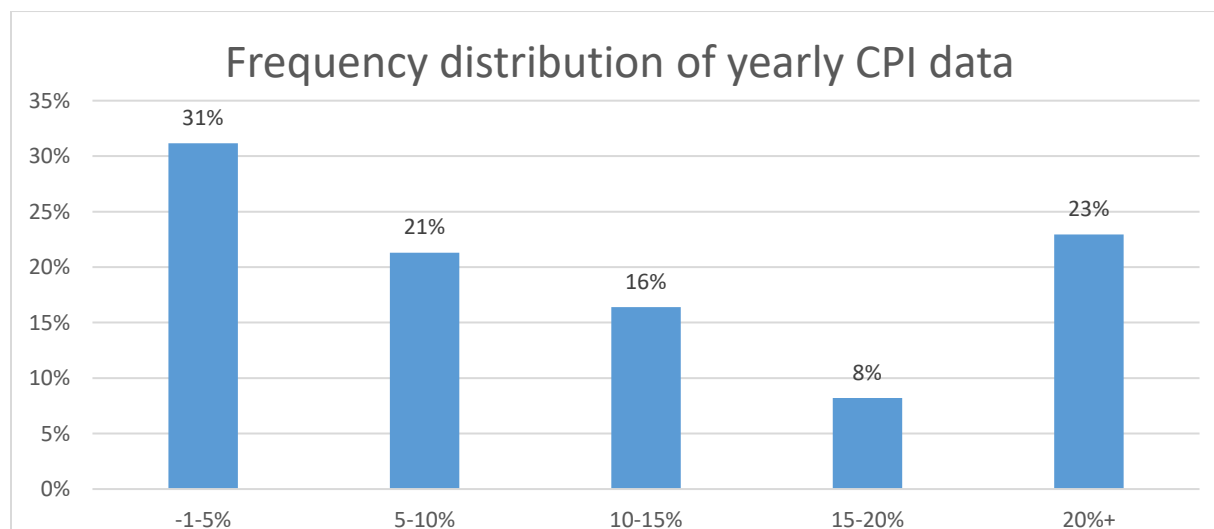


Source 1: 1961-2017. The World Bank

Source 2: 2017-2021. ABS, 2021

Using a frequency distribution table, the yearly inflation has historically had a 48% chance of being above 10%.

Figure 23b Frequency distribution of Suriname yearly CPI



Source 1: 1961-2017. The World Bank

Source 2: 2017-2020. ABS, 2020

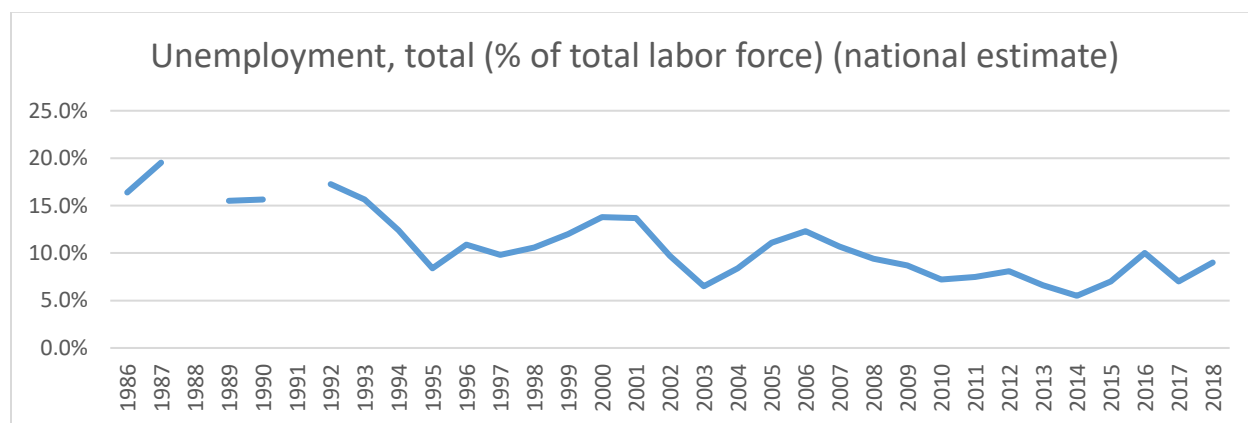
Source 3: April 2020. ABS, 2020



### 5.3.2 Unemployment

Using data from both the IMF and The World Bank, Suriname has had an average unemployment rate of 10.3% since 1986 and an average of 9.1% since 2000.

*Figure 24: Suriname yearly unemployment rate*



*Source 1: 1986-1993. World Bank*

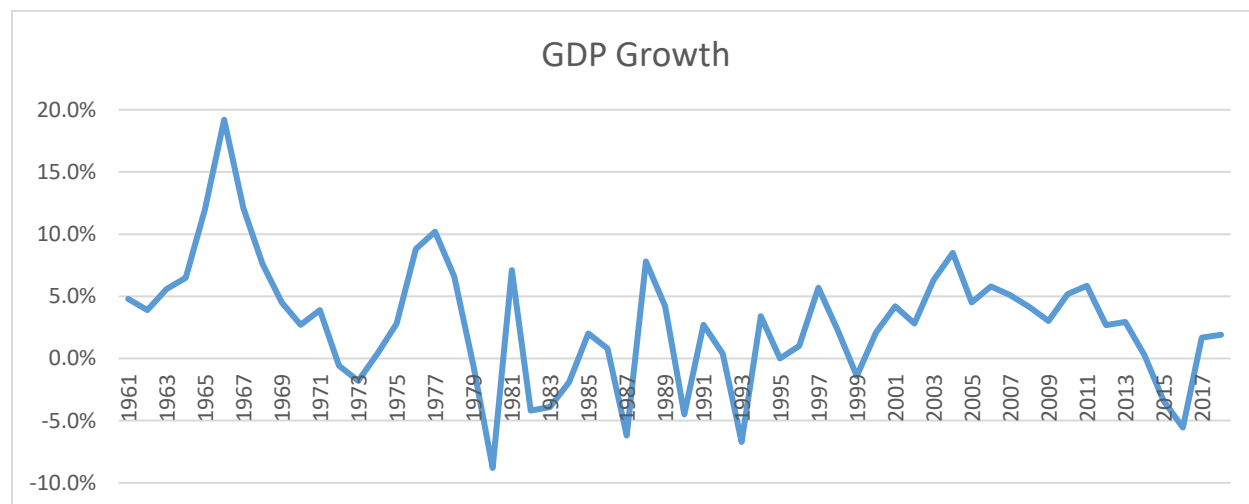
*Source 2: 1986-1993. IMF*

*\*Note: Data points for 1988 and 1991 unavailable)*

### 5.3.3 GDP Growth

Since 1960, Suriname has had an average GDP growth of 2.9% and over the last 20 years it has been 3.1%. This is higher compared to Latin America and the Caribbean, with an average of 2.5% over the same period.

Figure 25: Suriname yearly GDP growth



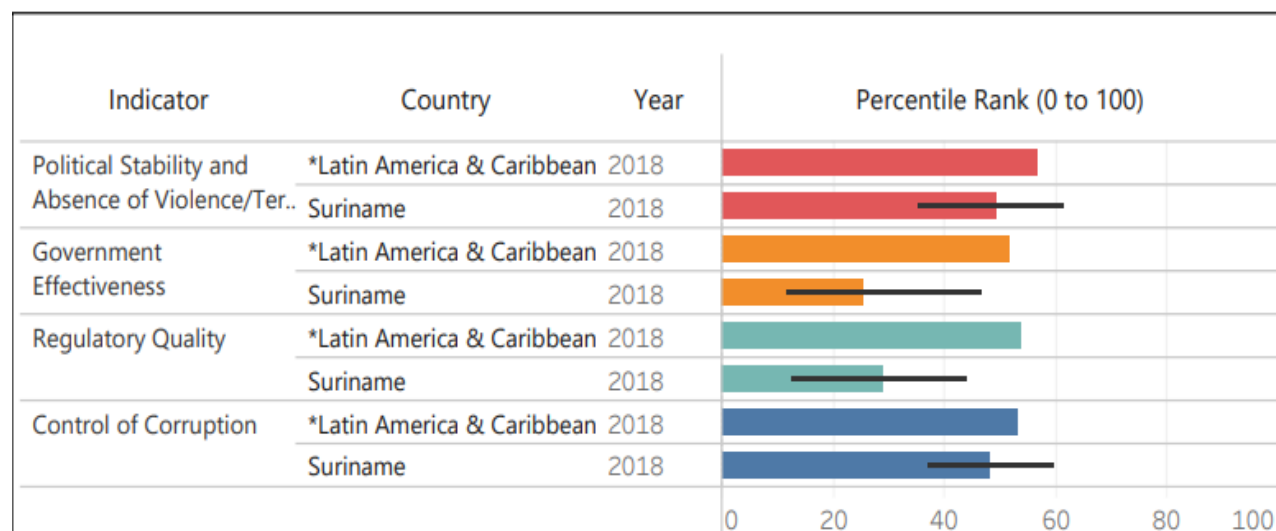
Source: World Bank

### 5.3.4 Worldwide Governance Indicators

The Worldwide Governance Indicators (WGI) reports aggregate and individual governance indicators for over 200 countries, for six dimensions of governance: Voice and Accountability, Political Stability and Absence of Violence, Government Effectiveness, Regulatory Quality, Rule of Law, and Control of Corruption. The data is based on over 30 individual data sources produced by a variety of survey institutes, think tanks, non-governmental organizations, international organizations, and private sector firms.

A quick overview gives Suriname the following ratings for 4 of the 6 WGI's. Looking at the data, there seems to be a clear indication that, compared to the region, Suriname is still lacking in all these 4 fundamental governance metrics.

Figure 26: Suriname World Governance Indicators compared to the region



Source: World Bank World Governance Indicators

1. *Political Stability and Absence of Violence*, defined as “perceptions of the likelihood of political instability and/or politically motivated violence, including terrorism”

Suriname ranks 18<sup>th</sup>/35 in the region (South America & Caribbean), making it moderately instable.

2. *Government Effectiveness*, defined as “perceptions of the quality of public services, the quality of the civil service and the degree of its independence from political pressures, the quality of policy formulation and implementation, and the credibility of the government's commitment to such policies”

Suriname ranks 31<sup>st</sup>/35 in the region (South America & Caribbean), making the government relatively highly ineffective and/or apolitical. The only countries ranked lower than Suriname are Guatemala, Nicaragua, Venezuela, and Haiti.

3. *Regulatory Quality*, defined as “the ability of the government to formulate and implement sound policies and regulations that permit and promote private sector development.”

Suriname ranks 28<sup>th</sup>/35 in the region (South America & Caribbean), making the regulatory environment relatively highly unsound.

4. *Control of Corruption*, defined as “perceptions of the extent to which public power is exercised for private gain, including both petty and grand forms of corruption, as well as "capture" of the state by elites and private interests”.

Suriname ranks 18<sup>th</sup>/35 in the region (South America & Caribbean), making it moderately corrupt.

## 6. Conclusion and Suggestions

The purpose of this paper was to answer and explain three questions:

1. What are the dominant viewpoints surrounding the minimum wage?
2. What are the pros and cons of both?
3. What viewpoint would be best implementable in Suriname based on regional similarities?

Important to note is that omitted from the concept of the minimum wage was the effects on economic inequality. The conclusions might have been the same if economic inequality was factored into the paper but future research can do a more thorough analysis.

Regarding questions 1 and 2: The minimum wage can best be described by the following schools of thought: Neoclassical and Keynesian. The Neoclassical school focuses on a sense of individualism; the idea that, in the long run, there is an invisible hand guiding the markets to an equilibrium. Any inefficiencies would be short-lived or – at the very least – better than government regulation would otherwise provide. In their opinion, a minimum wage – if set above the current equilibrium wage – the resulting increase in employer labor costs will naturally lead to an increase in unemployment or other forms of cost-cutting to absorb the increasing wage-rates. This will paradoxically damage the ones the minimum wage intends to defend. An employee paid below market wage is arguably better than an employee unemployable at a higher wage.

The Keynesian school focuses on a sense of structuralism; the idea that, in the short-term, there are substantial market inefficiencies which lead to lost economic potential. According to them, there is a need for a (neutral) third party to guide the market to a balance without massively distorting the delicate long-term equilibrium. In their opinion, asymmetric information between labor suppliers and labor demanders (among other factors) lead to a disequilibrium which can be fixed through a mandated minimum wage. They also argue that in certain circumstances, a minimum wage could even increase labor demand, although this evidence seems weak looking at

the data. The Funnel Graph of unemployment effects are mostly concentrated around the center, but there appears to be a larger left-leaning skewness, suggesting that disemployment effects are slightly more prevalent than employment effects.

Regarding the last (and most important) question, which viewpoint would be best implementable in Suriname, it is important to consider possible solutions in the context of the Surinamese economy. Any possible solutions should either alleviate some of the problems or – at the very least – not aggravate the problems. The problems being an overdependence on national resources, a large government sector, a significant portion (33.5%) of the unemployed population concentrated among young people (those 24 and younger).

There also appear to be significant difficulties in especially Latin American countries with successfully implementing and maintaining the minimum wage correctly as high inflation, a relatively large informal sectors and inefficient governments increase the burden on regulatory agencies to do so correctly. These concerns should be even more amplified in Suriname since there are substantially larger weaknesses in governance and economic stability. Before even conceptualizing a possible minimum wage, it is necessary to have the correct data to assess needs and consult relevant parties, the macroeconomic stability to maintain the purchasing power without distorting the labor market and effective government to calculate the trade-offs, but with a 35-45% informal sector, the second lowest ranking in (regional) government effectiveness and a (regionally) higher-than-average inflation rate, Suriname has a difficult task. The 25% real decrease in the minimum wage since 2015 is a testament to this.

The problem with the Keynesian or Neoclassical conceptualization of the minimum wage is that it is, by definition, a law. Unless explicitly stated otherwise, this policy does not consider flexibility in minimum wage legislation pending evolving labor market dynamics. This is supported by the consulted research, in which there is not once explicitly mentioned under which circumstances a minimum wage could be abolished. The research only mentions adjusting the minimum wage. Combine that research with the ILO's conclusion that minimum wage legislation has had a rising trend; a cautious conclusion would be that minimum wages are (at least) semi-permanent.

That is inherently contradictory to both the Neoclassical and Keynesian approach. Both systems disagree with long-term government interventionism, as that would create more economic distortion, relative to what otherwise would have been under the short-term cycles inherent to free-market capitalism.

The conclusions, consistent with the literature suggests 3 possible paths going further. (1) Suriname can either accept no minimum wage at all, fully in line with the Neoclassical paradigm. This can be done in the form of either abolishing the minimum wage outrightly or simply not adjusting it any further (as inflation would simply erode the purchasing power leading to the minimum wage to longer being above the market equilibrium). This could either be for the long-term but should at least be done until there are significant increases macroeconomic stability, government effectiveness, a reduction in the informal sector and a significant increase in youth employment. This would decrease the size of government in the economy, stimulate private sector growth, leading to increasing long-term productivity and (arguably) lead to informal companies integrating more into the formal economy. More formal integration would make those companies able to scale upwards in size. Abolishing the minimum wage would also increase youth participation in the labor market, where unemployment effects seem to be concentrated (those under the age of 24). The potential downside is that there would be no techniques for dealing with short-term inefficiencies in the labor market, leading to lost economic potential. Another downside is that it is impossible to separate the politics from the economics. The abolishment of the minimum wage is politically difficult once already adopted, as workers have come to expect a “living wage” irrespective of their productivity. Even if the public would be well-instructed into the negative effects of the policy, the opposing party would not hesitate at taking advantage of the situation and scoring political points.

Or; (2) Suriname adopts a temporary minimum wage in times where the labor market is not in equilibrium, or at least in a relatively large disequilibrium. These minimum wages can be used to target specific employees in specific sectors. These minimum wages should consider all relevant actors, especially business-owners and workers’ representatives and should be used in a countercyclical fashion. The Keynesian approach would mean applying the minimum wage during a time of economic boom when there is more capacity for employers to pay, while removing/reducing the minimum wage during a recession in order not to increase the stress on

the employers to facilitate employment. It is important that this law be temporary, does more good than harm and that it is fundamentally a tool to facilitate equilibrium between supply and demand of labor and not explicitly a tool to guarantee a “living wage”. The potential downside is that a temporary minimum wage adds more complexity to an already-complex topic, which means correctly assessing when to implement it and for how long to do so. Doing that would be very difficult, but any potential harmful side-effects from poor minimum wage legislation would be temporary and corrected by the free market afterwards.

Lastly; (3) the minimum wage could be imposed temporarily (similar to point 2), in which the government could offset the difference between the (lower) market wage and the (higher) minimum wage. If the government would have to pay for the “costs” of minimum wage, there would arguably be a bigger incentive to do so correctly. It would arguably stimulate employers to integrate into the formal economy as they would need to have proper documentation and registration for their workers to receive the financial stimulus. The potential downside is that it could be abused by both employers (paying an even lower market wage than they otherwise would pay, knowing that government would fill in the difference) and employees (conspiring with employees to fake having a lower salary. An example would be, in the case of an SRD 12,00 hourly minimum wage; an employee who is earning SRD 13,00 per hour could fake earning SRD 10,00 per hour. That way the employee could earn an SRD 2,00 extra per hour when he otherwise would not have been receiving any minimum wage at all).

All the above-mentioned conclusions would arguably increase youth employment, decrease the size of government in the economy, stimulate private sector growth and integration in the formal economy.



## Bibliography

- Beales, H., Brito, J., Davis, J., DeMuth, C., Devine, D., Dudley, S., . . . McGinnis, J. O. (2017). "Government Regulation: The Good, The Bad, & The Ugly. *Federalist Society*.
- Bell, L. (1997). The Impact of Minimum Wages in Mexico and Columbia. *Journal of Labor Economics*.
- Bhorat, H., Kanbur, R., & Stanwix, B. (2019). Compliance with labor laws in developing countries. *IZA World of Labor*.
- Biesebroeck, J. V. (2015). *How tight is the link between wages and productivity? A survey of the literature*. Geneva: International Labour Office.
- Boeri, T., & van Ours, J. (2013). *The Economics of Imperfect Labor Markets*. Princeton University Press.
- Clemens, J., & Wither, M. (2014). *The Minimum Wage and the Great Recession: Evidence of Effects on the Employment and Income Trajectories of Low-Skilled Workers*. Cambridge, MA: National Bureau of Economic Research.
- Davidson, A. (2012, February 1). *It Is Safe to Resume Ignoring the Prophets of Doom ... Right?* Retrieved from New York Times: <https://www.nytimes.com/2012/02/05/magazine/economic-doomsday-predictions.html>
- DeMarco, J. (2020). *More Than a Third of Working Americans Experienced a Pandemic Pay Cut*. MagnifyMoney. Retrieved from <https://www.magnifymoney.com/blog/banking/coronavirus-pay-cut-survey/>
- Derenoncourt, E., & Montialoux, C. (2018). *Minimum Wages and Racial Inequality*. Harvard.
- Doucouliagos, H., & Stanley, T. (2009). *Publication Selection Bias in Minimum-Wage Research? A Meta-Regression Analysis*. *British Journal of Industrial Relations*, Vol. 47.
- Farrell, D. (2004). The Hidden Dangers of the Informal Economy. *The McKinsey Quarterly*.
- Fiszbein, A. (1992). Do Workers in the Informal Sector Benefit from C,uts in the Minimum Wage? *The World Bank*, 6.
- Friedman, M. (1966). *Minimum-Wage Rates*. The Newsweek/Daily Beast Company LLC.
- Grimshaw, D., & Miozzo, M. (2003, March). Minimum wages in Latin America: identifying the employment and pay equity effects. International Labour Office.
- (2019). *Huishoudens in Suriname 2015-2018*. Paramaribo: Algemeen Bureau voor de Statistiek.
- International Labour Office . (2008). Minimum wages and collective bargaining: Towards policy coherence. *Global Wage Report 2008/09*, 35.
- International Labour Organization. (2014). Minimum wage systems. *International Labour Conference, 103rd Session, 2014*.
- International Labour Organization. (n.d.). Minimum Wage Policy Guide. ILO.

- Jahan, S., Mahmud, A. S., & Papageorgiou, C. (2014). What is Keynesian Economics? *Finance and Development*, 53-54.
- Jahan, S., Mahmud, S. A., & Papageorgiou, C. (2014, September). Retrieved from International Monetary Fund: What Is Keynesian Economics?
- Jardim, E., Long, M. C., Plotnick, R., van Inwegen, E., Vigdor, J., & Wething, H. (2017). *Minimum Wage Increases, Wages, and Low-Wage Exmployment*. Cambridge: National Bureau of Economic Research.
- Jill Rubery, D. G. (2009, July). Gender and the minimum wage.
- Kalenkoski, C. M. (2016). *The effects of minimum wages on youth employment and income*. Institute for the Study of World Labor.
- Kar, S., & Datta, D. (2014). *Industrial and Labor Economics: Issues in Developing and Transition Countries*. Calcutta.
- Karstensson, L. (2017). *In Classical and Keynesian Times: The Twentieth Century Economy Revisited*. University of Nevada, Las Vegas.
- Kaufman, B. (2010). Institutional economics and the minimum wage: Broadening the theoretical and policy debate. Griffith University.
- Kaufman, D., & Kraay, A. (n.d.). *World Governance Indicators*. Retrieved from World Bank: <http://info.worldbank.org/governance/wgi/>
- Keynes, J. M. (1923). *A Tract on Monetary Reform*. London: Macmillan Publishers.
- Krasniqi, M. (2007). *Changing Attitudes towards Minimum Wage Debate: How is The Neoclassical Economic Theory holding in the face of a New Era of Minimum Wage Studies?* George Mason University School of Public Policy.
- Kristensen, N., & Cunningham, W. (2006, March). Do Minimum Wages in Latin America and the Caribbean Matter? *Policy Research Working Paper; No. 3870*.
- Lau, M. (2018). Against the Minimum Wage. *Frontier Centre for Public Policy*, 10.
- Lemos, S. (2004). *The Effect of the Minimum Wage on Prices*. Bonn: University of Leicester and IZA .
- Lemos, S. (2006, January). Minimum Wage Effects in a Developing Country. University of Leicester, Economics Department.
- Leonard, T. C. (2000). The Very Idea of Applying Economics: The Modern Minimum-Wage Controversy. *History of Political Economy*, 117-144.
- MacDonald, Scott B. (2017, April 20). *Suriname's Economic Crisis*. Retrieved from Center for Strategic & International Studies: <https://www.csis.org/analysis/surinames-economic-crisis>
- Maloney, W., & Mendez, J. (2004). Measuring the Impact of Minimum Wages Evidence from Latin America. In *Law and Employment: Lessons from Latin American and the Caribbean*. National Bureau of Economic Research.

- Marchal, P.-L. (2014). *Advantages and Disadvantages of the Minimum Wages. Comparing the Neoclassical and Post-Keynesian Perspectives*. University of St. Gallen.
- Margins by Sector*. (2020, January). Retrieved from NYU Stern School of Business: [http://pages.stern.nyu.edu/~adamodar/New\\_Home\\_Page/datafile/margin.html](http://pages.stern.nyu.edu/~adamodar/New_Home_Page/datafile/margin.html)
- McManus, S. (2018, June 1). Retrieved from ACTU.org.au: <https://www.actu.org.au/actu-media/media-releases/2018/minimum-wage-increase-another-hard-won-step-towards-fairness>
- Miller, D. (1984). *Anarchism*. Oxford: Nuffield College.
- Minimum Wage Policy Guide. (2016). *ILO*.
- Neumark, D., Salas, J. M., & Wascher, W. (2013). Revisiting the minimum wage-employment debate: Throwing out the baby with the bathwater? *Forschungsinstitut zur Zukunft der Arbeit*.
- Patrick Belser, M. d. (2005, April). *ILO Minimum Estimate of Forced Labour in the World*. International Labour Organization.
- Peters, A. (2017). *Estimating the Size of the Informal Economy in Caribbean States*. Inter-American Development Bank.
- Rama, M. (1996). *The Consequences of Doubling the Minimum Wage*. The World Bank.
- Rothbard, M. (2004, 3 18). *The Myth of Efficient Government Service*. Retrieved from Mises.org: <https://mises.org/library/myth-efficient-government-service>
- Schmitt, J. (2013, February). *Why Does the Minimum Wage Have No Discernible Effect on Employment?* Center for Economic and Policy Research.
- Schwellnus, C. A. (2017). *Decoupling of wages from productivity: Macro-level facts*. Paris: OECD Publishing.
- Schwellnus, C., Kappeler, A., & Pionnier, P.-A. (2017). *Decoupling of Wages from Productivity: Macro-level Facts*. Paris: Organisation for Economic Co-operation and Development.
- Smith, I. (2015). *Minimumloon in Suriname, een traject van 45 jaar*. Paramaribo: Ministerie van Arbeid.
- Sowell, T. (1980). *Knowledge and Decisions*. Basic Books.
- Sowell, T. (2011). *Basic Economics*. New York: Basic Books.
- Stewart, M. B. (2002, January). *The Impact of the Introduction of the UK Minimum Wage on the Employment Probabilities of Low Wage Workers*. University of Warwick.
- Strobl, E., & Walsh, F. (2003). *Minimum Wages and Compliance: The Case of Trinidad and Tobago*. The University of Chicago.
- The Economist*. (2006, November 3). Retrieved from <https://www.economist.com/special-report/2006/11/23/a-heavyweight-champ-at-five-foot-two>
- Travail Conditions of Work and Employment Programme*. (n.d.). Retrieved from International Labour Organization:

[https://www.ilo.org/dyn/travail/travmain.sectionReport1?p\\_lang=en&p\\_countries=AG&p\\_sc\\_id=1&p\\_year=2011&p\\_structure=1](https://www.ilo.org/dyn/travail/travmain.sectionReport1?p_lang=en&p_countries=AG&p_sc_id=1&p_year=2011&p_structure=1)

Watkins, D., & Brook, Y. (2015). Turning the Tables on the Inequality Alarmists. *The Ayn Rand Institute*.

Weintraub, E. (2007). *Neoclassical Economics*. Retrieved from The Library of Economics and Liberty: <https://www.econlib.org/library/Enc1/NeoclassicalEconomics.html>

William Maloney, J. M. (2014, August). Measuring the Impact of Minimum Wages. Evidence from Latin America. *Law and Employment: Lessons from Latin American and the Caribbean*. University of Chicago Press.

Wilson, M. (2012). *The Negative Effects of Minimum Wage Laws*. Cato Institute.

Wolff, D. R., & Resnick, A. S. (2012). *Contending Economic Theories*. London: MIT Press.

(2012). *Working Conditions Laws Report 2012*. ILO.

## **Appendix 1: Terminology in ABS report**

1. The ICLS definition, which is “All persons in the economically active age group who, during the reference period (3 months), were not employed and in this period actively seeking work for pay or profit or tried to come to economic activity on own account.”
2. Those in the category “not actively seeking” employment.
3. Persons available but not seeking work, which is defined as:
  - 3a. Discouraged workers 1: All persons in the economically active age group, without jobs who sought work but during the reference period (3 months) did not make concrete attempts to engage in a job or to be economically active on own account.
  - 3b. Discouraged workers 2: All persons who, during the reference period (3 months), were not classified as economically active because they were not seeking work, but who are expected to be seeking work based on the prevailing norms, particularly because they are available for work. Specifically, these are persons who are not employed and are not seeking work, although they are no homemaker, student, not unfit for work and do not receive income (ABS, 2019, p. 283).