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Quality of Employment in Cameroon: Does Social Capital Matter?

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ABSTRACT

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Issues related to job quality are increasingly taking centre stage in professional and scientific circles because of the stakes involved although the determinants of job quality have been widely studied in the literature, little is known about how social capital (index) can affect job quality. To fill this gap, this article examines the effect of social capital on the quality of employment in Cameroon, using data from the Fourth Cameroon Household Survey carried out by the National Institute of Statistics (NIS) in 2014. Job quality is apprehended according to the multidimensional approach via the construction of an index from the Multiple Correspondence Approach (MCA) on four dimensions, namely remuneration, job security, working time and job satisfaction. We mobilize the double least squares model (2lsq), to address the issue of endogeneity bias associated with social capital. The empirical results show that social capital has a negative and statistically significant effect on the quality of employment in Cameroon. Our results suggest the need to raise awareness among users of social capital and to put in place policies that strengthen formal employment channels and reduce reliance on informal methods of insertion in the labour market.

JEL Classification:
A13, J24, J21, C35

Keywords:
social capital, job quality, double least squares model, Cameroon

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1. Introduction

In the process of defining and implementing economic policies, many countries place a high priority on combating unemployment, given that employment remains one of the most worrying issues both at the level of individual citizens and for all nations taken as a whole (Kamala et al, 2021). In developing countries in particular, alongside high unemployment rates, the informal nature of employment is another major challenge for employment policies. Indeed, in a relatively recent compilation of statistics from 47 countries and territories on this subject, the International Labour Office (ILO) indicates that, on average, over 40% of non-agricultural jobs in developing countries are informal in nature. Generally speaking, informal employment mobilizes workers who, in addition to being unable to meet their basic needs due to the low incomes they derive from their activities, operate in conditions that do not ensure the decency of their employment (ILO, 2014). Yet, as well as enabling workers to meet their basic needs and combat poverty, work, when it is decent and therefore considered to be of high quality, provides workers with self-esteem and dignity and is the main form of social integration (Kamala, et al., 2021).

Job quality is just as important as unemployment, especially in developing countries like Cameroon. According to the NIS report (2014), there is a general predominance of poor-quality jobs. Indeed, looking at job security (National Social Welfare Fund affiliation), the CHS 3 and 4 surveys (NIS, 2007; NIS, 2014) report that the rate of affiliated employees rose from 6.25% in 2007 to 8.49% 2014, an increase of 2.53%. Although there has been this slight evolution, this rate remains very low in relation to the proportion of employed workers. The same applies to job stability. Indeed, the IFC employment rate was 9% in 2014, compared with 6.25% in 2007. These rates reflect high job instability on the Cameroonian labor market. In terms of working hours, just 39.30% of employed persons work 48 hours a week, plunging the majority of these workers into invisible underemployment. However, although there was an increase in the working population between 2010 and 2014, it should be noted that this increase in labor supply is much more oriented towards the informal sector, i.e., 45.65% in the non-agricultural informal sector on the one hand and 42.31% in the agricultural informal sector on the other (NIS, 2014).

While the potential benefits associated with improving job quality are increasingly recognized, the precise definition and conceptualization of job quality continues to be debated (Muñoz de Bustillo et al., 2011; Warhurst et al., 2017). Regarding definition, Muñoz de Bustillo et al. (2011) point out that job quality is "elusive" because "it's one of those concepts [...] that everyone understands, but it's hard to define precisely". However, according to Knox et al.

(2015) job quality refers to the characteristics of work and employment, including: pay and benefits, work organization, training and skills development opportunities, career progression opportunities and worker autonomy, participation and representation. However, a review of existing literature reveals that job quality is conceptualized in at least three different ways (Knox and wright, 2022). The objective dimensions focus on job characteristics, in the form of economic and/or non-economic indicators (Osterman and Shulman, 2011; Kalleberg, 2011). In this approach, the analysis is normative insofar as reference attributes are defined to evaluate a job. A second approach is to gather workers' subjective accounts of job quality. This approach is termed subjective because it focuses on workers reporting aspects associated with their satisfaction (Davoine, 2008). In addition to these two approaches, there is a mixed approach described as multidimensional, which combines the two previous approaches described. This study adopts the multidimensional objective approach at the micro level, thus following the work of Cloutier-Villeneuve (2010), Déguilhem et al. (2019), Kamala et al. (2021) and N'Grantier (2022).

Given these challenges in job accessibility, individuals increasingly rely on informal networks often referred to as social capital to navigate the labor market (Yogo, 2013; Anton and Andersson, 2021). So, while spontaneous adaptations between labor supply and demand are encountering obstacles, and intermediation by the public and private sectors is coming up against limits, it is necessary to find and explore a new path, likely to fulfill functions that are indispensable to the proper functioning of the labor market. This is where the use of social capital as an informal mode comes in. In economics, social capital generally refers to the networks of social relations (Piracha et al., 2014), which individuals can mobilize to achieve their goals (Lin, 1999). However, Woolcock (2000) distinguishes three forms of social capital, namely attachment ties (nuclear family), bridging ties and contact ties (friends, colleagues, etc.). In the same vein, Nahapiet and Ghoshal (1998) make a three-dimensional distinction: structural, relational and cognitive. Note that this latter classification incorporates Woolcock (2000) classification. Thus, reviewing the contextual reality of these different aspects of social capital will enable us to make an assessment of this notion. However, it should be noted that, in parallel with the deterioration in both the quantitative and qualitative aspects of the labor market presented above, it is clear that the use of both technological (digital social networks) and non-technological (networks of relationships) social capital is on the rise, particularly in developing countries like Cameroon.

The CHS 4 report shows that recourse to the various aspects of both technological (ICTs) and non-technological social capital follows an upward trend in our context. With

regard to non-technological social capital, the CHS 4 report shows that 45% of individuals are members of an association, 17.96% use personal relationships as a channel of access to information on the job market, and 97% belong to a religion. In terms of recourse to social assistance in the job market, 74.74%, 70.77%, 38.91% and 31.83% of individuals respectively declared that they turned to family, friends, neighbors and religious associations for help in the event of difficulties. Furthermore, the cognitive aspect of social capital is perceptible in the context through the proportion of individuals who can read and write French, English, the vernacular and Arabic, i.e., 65%, 50%, 25.08% and 10.83% of individuals respectively. In addition, CHS 4 report reveals that 13.42% of employed people are members of a trade union. In terms of technological social capital, CHS 4 report reveals that between 2010 and 2020, the rate of internet use has evolved considerably, rising from 4.3% in 2010 to 18.3% in 2015 and 37.8% in 2020. At the same time, cell phone subscriptions rose from 42.5% in 2010 to 77.9% in 2015, and will fall to 84.2% in 2020. This rise is accompanied by an increase in the cell phone penetration rate over the same period: 43.96% in 2010, 82.31% in 2015 and 84.2% in 2020.

All of these variables, which are used to assess the social capital of individuals on the labour market, derive from the literature in which they are considered as attributes of this notion (Putnam, 2000; Zak and Knack, 2001; Requena, 2003; Moore et al., 2010; Piracha et al., 2014; Kloman-Kouakou et al., 2020). It follows from the statistics in graphs 1 and 2 that the use of social capital appears to be a major means of obtaining a quality job on the labour market.

From this point of view, the contribution of social capital to the functioning of the labour market is conceivable. Indeed, social capital is a highly effective resource for gathering information about agents and the work environment (Sirvin, 2001). It can thus be argued that social capital makes access to information easier and less costly (Stigler, 1962; Granovetter, 1973), at a time when mastery of information has become a key factor in improving job quality (Colombier, 2007; Rubery and Grimshau, 2001; Magruder, 2010; Deguilhem, 2018). This positive vision of social capital is de facto a lever for achieving the eighth Sustainable Development Goal (SDG), which calls on the international community to “promote sustained, shared and sustainable economic growth, full and productive employment and decent work for all”.

Despite extensive research on job quality and social capital globally, little empirical work has explored the link between these concepts in the Cameroonian labor market. This study addresses this gap by adopting a multidimensional approach to social capital and job quality. Indeed, in Cameroon, most studies conducted on labor supply have focused either on traditional

determinants of labor market insertion (Njikam et *al.,* 2005), or on youth participation in the labor market (Tchakounté and Mbam, 2016), or on the digital divide (Bakehe and Fambeu, 2015; Bakehe et al., 2017 ; Fambeu, 2021) or on the impact of public policies on youth employment (Ngueken, 2021), or role of ICTs to acces to employment, insertion or quality of young employment (Meka'a et al., 2023; Njiepue Nouffeussie and Nzepang, 2024; Njiepue Nouffeussie et al., 2025) , or on the effect of gender on job quality (Fotso, 2021) or on the role of social capital on labour market participation and job perception (Yogo, 2013).

This study aims to examine the impact of social capital on job quality in Cameroon. It Apply a multidimensional framework to assess social capital and job quality in the labor market. This study is interesting for at least two reasons: firstly, we propose to apply the analytical framework of job quality to the micro-economics of exiting unemployment, focusing more precisely on the qualitative characteristics of the jobs found by jobseekers, i.e., remuneration, job stability, working hours and job security, as well as job satisfaction. Secondly, the analytical approach of this study reinforces existing knowledge on this issue, which has been little studied in African countries. To the best of our knowledge, this study is one of the first to link social capital and job quality in the labor market, both apprehended from a multidimensional angle through indices in the Cameroonian context. Finally, ultimately, this study contributes to the broader understanding of employment dynamics in Cameroon by integrating a multidimensional view of social capital into job quality assessments.

The remainder of this document is organized into four sections. Section 2 presents a synthetic review of the literature, section 3 describes the methodological approach, section 4 presents and discusses the results, and section 5 concludes the study.

2- Literature review

This section first presents the determinants of job quality, then focuses on the influence of social capital and finally presents an empirical review of the literature on the link between social capital and job quality.

2.1. Determinants of job quality

Several determinants of job quality are highlighted in the literature by both theoretical and empirical work. According to the theory of human capital developed since the work of Becker (1964), the importance of the level of training for the individual in obtaining a quality job has not suffered from any major dispute, apart from a few paradoxes often linked to the lack of correlation between level of education and employability (N'Gratier, 2017). Proponents of

this theory thus postulate that human capital is the main determinant of job quality. Indeed, an educated and trained individual is predisposed to a high salary, the main determinant of job quality according to the standard approach of this concept. It is in this perspective that De La Fuente and Ciccone (2002) argue that a fairly high human capital also allows employees to stay in business for as long as possible.

Subsequently, various other factors likely to explain obtaining a quality job are identified in the literature. N'Gratier (2017) shows that the socio-professional category of the individual is an important determinant of job quality: executives are more likely to benefit from a quality job compared to non-executives. Indeed, executives are those who benefit the most from training (general or specific) in the company compared to non-executives. It is also generally accepted that executives are design agents[2] and as such must be constantly aware of the latest changes.

In addition, worker's marital status and sector of activity positively influence the probability of obtaining a quality job (N'Gratier, 2017). In addition, according to the Institute of Statistiques to Québec (Cloutier-Villeneuve, 2015), it is less advantageous to live in a semi-urban or rural area of residence in terms of job quality than to live in an urban. Urban center, which are more populated, thus offer a greater probability of obtaining better jobs.

Job seniority is also a determinant of job quality. Indeed, people who have been working in an organization for a short time (less than a year) have a lower job quality than people who have been working for the same employer for at least four years. Also, no significant difference is observed between people working in an organization for less than a year and those working in the same place for one to three years (Cloutier-Villeneuve and Sait-Frard, 2015).

Establishment size is also an important determinant of job quality. Indeed, working in a smaller establishment (50 employees or less) is associated with lower job quality. For their part, people working in medium-sized establishments (51-199 employees) have lower job quality than those working in large establishments (500 employees and more).

For supporters of the standard approach (Rosen, 1986), the level of salary is the primary determinant of job quality. Thus, " *low wages* " would in this case reflect jobs of poor quality (*Bad jobs)*, i.e., which combine many unfavorable criteria, beyond the single level of salary (poor working conditions). Other authors in favor of the economics of happiness emphasize satisfaction as a determinant of job quality (Davoine, 2012). However, with the advent of ICTs,

[2] Unlike other categories such as workers and other subordinate agents who are enforcement agents.

the world of employment has experienced many upheavals affecting both the quantitative and qualitative dimensions of employment.

2.2 The role of social capital

The social capital theory developed by socio-economists (Granovetter, 1973; Bourdieu, 1980; Lin et al., 1981; Coleman, 1988; Putnam, 1999) supports the thesis that social capital is the "key" to obtaining a quality job on the labor market. This theory holds that social relationships constitute social capital. Since Granovetter's pioneering work (1973, 1995) on the importance of relational networks in gaining access to employment, a number of studies have focused on the "positive externalities" of social capital. These studies put forward the idea that social capital resolves market imperfections affecting both job seekers and job providers. Indeed, social capital offers access to new information (Calvó-Armengol and Jackson, 2007; Castilla et al., 2013), better reporting of actors' skills (Montgomery, 1991; Beaman and Magruder, 2012), more effective selection of the best candidates (Kugler, 2003), better knowledge of agents' behavior, their environment and collective action (Sirvin, 2001) and, finally, improved quality of the jobs filled (Yanjie Bian, 1997; Kumar and Matsuaka, 2009; Cappellari and Tatsiramos, 2015; Deguilhem et al., 2018; Deguilhem et al., 2019; Anton and Andersson, 2021). For these authors, insertion into a quality job depends more on the diversity of people with whom an individual has contact within the organization and on whom he or she can rely.

Another vast literature analyzes the link between social capital and job quality through the opportunity and necessity theses of social capital in a segmented labor market, including protected and unprotected individuals (Deguilhem et al., 2019). In the same vein, the economic literature on wage differentials between individuals puts forward discrimination as an explanatory factor for productivity. However, Blau et al (2006) point out that a significant proportion of these wage gaps remain unexplained. With this in mind, some authors put forward social capital as another explanatory factor (Wapot, 2013; Yogo, 2013), albeit with a nuanced effect. Generally speaking, the socio-economic literature acknowledges the influence of social capital on the various dimensions of job quality. However, it should be remembered that most of these links are indirect. Indeed, the influence of social capital on job stability may be mediated by mobility in the labour market (Quentin et al., 2008) or by the increased bargaining power it induces (Kumar and Matsusaka, 2009). The effect on social protection could be through the mobilization of resources or access to information. The influence on the subjective aspect could pass through various channels, including access to information, stress, cooperation

and resource mobility. In addition, as Lin et al. (1981) social resource theory points out, the influence of social capital on remuneration may be mediated by network quality. Indeed, a good-quality network enables the individual to land a well-paid and therefore high-quality job.

2.3 Empirical review

Numerous studies have empirically demonstrated the effect of social capital on job quality in both developed and developing countries. These studies have produced contrasting results. In the case of developed countries, Granovetter (1973) examined the effectiveness of social capital in relation to job quality, measured in terms of wages, mainly in the United States. His early work revealed that while immediate social networks (relatives and close friends) have an impact on career transitions, this is not comparable to the positive effect of weak ties (relationships with work colleagues, for example) on career advancement and wages. Conversely, Montgomery (1991) found that the use of networks had a positive impact on career transitions, but there was no evidence of higher wages, even when weak ties were used.

In the American context, Seibert et al (2001) use a structural equation system on a sample of 448 employees to demonstrate that social capital positively affects job quality. These authors specify that this effect is mediated by three channels, namely access to information, resource mobilization and sponsoring or monitoring. In the same context, Alesina and Guilano (2007) find similar results. Indeed, the authors find that social capital positively affects job quality by improving preference for a national social security system by 0.02%. Cappellari and Tatsiramos (2015) point out that in the bulk of the work, compared to other workers, referenced workers earned good-quality jobs, characterized by higher wages, higher productivity, lower turnover and more senior positions. Brown et al. (2016) follow suit, investigating the hiring process and relationships between referral, match quality, wage trajectories and turnover at a single US firm, and test various predictions of theoretical models of labor market referral. They find that referred candidates are more likely to be hired, and benefit from an initial salary advantage, and therefore a quality job.

In a non-American context, the results point in the same direction. Indeed, Dustmann et al (2016), in a study conducted in Germany, find that the specific productivity of a worker referred to the company is less uncertain than that of a worker hired through formal channels. As a result, referred workers earn higher wages, therefore have good-quality jobs and, consequently, are less likely to leave the company. In the same context, Jahna and Neugart (2020), for their part, provide empirical evidence that social capital, this time apprehended

through the neighborhood network, increases the stability of the new job found and decreases the probability of losing the new job found within 12 months.

In their study conducted in France, Greenan et al (2012) are more precise. Using data from the OCC (Organisational Change and Computerisation) coupled survey system, the authors adopt a descriptive approach to show how technological social capital (ICTs) influences working conditions. They show that digitization diversifies and strengthens ties between workers, thus echoing the findings of Greenan et al. (2012). However, the results found in the aforementioned studies are only confirmed in the context of developed countries. Thus, it is imperative to assess the relationship in the context of developing countries, where the majority of studies establish a negative link.

Kloman-Kouakou et al. (2020) analyze the effects of social capital, captured through the use of personal and friendly relationships, on the quality of youth employment in Côte d'Ivoire. To do so, they mobilize the generalized Tobit type 2 model on data from the IDRC-funded CREMIDE-CRDI survey conducted in 2017-2018 in Côte d'Ivoire. They arrive at the result that social capital negatively influences job quality in Côte d'Ivoire.

While some studies highlight the positive effects of social capital on job quality, others emphasize its negative effects in both developed and developing economies. Such is the case of Addison and Portugal (2002), who found that workers using social capital benefited from low-quality, low-income jobs. The same is true of Kramarz and Skans (2014), who define networks at family level and study the role of fathers in their children's employment and earnings. They thus found that lower-level graduates were more likely to find employment through their parents, but with a wage penalty. To do this, they use a Swedish dataset of graduates of all levels of education, linked to the overall Swedish population, which includes detailed information on family ties, neighborhoods, schools, class composition, children's parents and employers, etc. All in all, the results indicate that parental ties are a determining factor in how young Swedish workers find and progress in their work. On the other hand, going in the same direction, Matsuda and Nomura (2017) in their study conducted in Bangladesh show that, although the use of social capital facilitates insertion into the labor market, the types of jobs available via this channel are narrower and of poorer quality.

Fafchamps and Moradi (2015) meanwhile use recruitment data from the British colonial army in Ghana between 1908-1923 and show that referenced workers underperform other workers, particularly when recruited from the higher ranks of the military. Berardi (2013) goes in the same direction, highlighting the role played by social capital, captured by social networks, as a recruitment channel and the gaps in job quality captured by wage differentials, between

employees recruited through formal and informal recruitment channels. He finds that in the case of Senegal's formal manufacturing sector, workers recruited through the informal mode benefit from unskilled jobs associated with a wage penalty, especially when ties are stronger.

Deguilhem et al. (2019) examine the effect of social networks by investigating how the mobilization of family or friendship ties in the job search affects job quality; they use both quantitative and qualitative data. Drawing on the socio-economic literature on segmented labor markets, the authors propose an original, multi-dimensional measure of job quality, and a successful estimate of the effect of relationship networks (social capital) on job quality, which makes it possible to deal with complex heterogeneity between groups. Using the large integrated household survey and a sample of workers in Bogotá in 2013, they find that the use of ties is negatively correlated with job quality for vulnerable people. Similarly, the use of social relations is not significant for protected workers. Complemented by focus group interviews, these results raise questions about the prevailing difference in relational practices between networks of necessity for precarious workers and networks of opportunity for protected workers in the Colombian capital.

In the Cameroonian context, Yogo (2013) evaluates the effects of the use of social capital, measured by the use of the relational network, on job quality as measured by social protection and on job stability. To do so, it uses the instrumental variable probit model (IV) on data from EDIJ[3] (2008). The results suggest a contrasting effect of social capital on job quality. Specifically, the author shows that social capital has a mixed effect on job stability and a non-significant effect on social protection in Cameroon.

3- Methodology

This section first reviews the theoretical perspective and measurement approaches**,** then outlines the construction of the indices and finally presents model and estimationtechnique, data, variable and descriptive statistics.

3.1. Theoretical perspective and approaches to measuring job quality and social capital

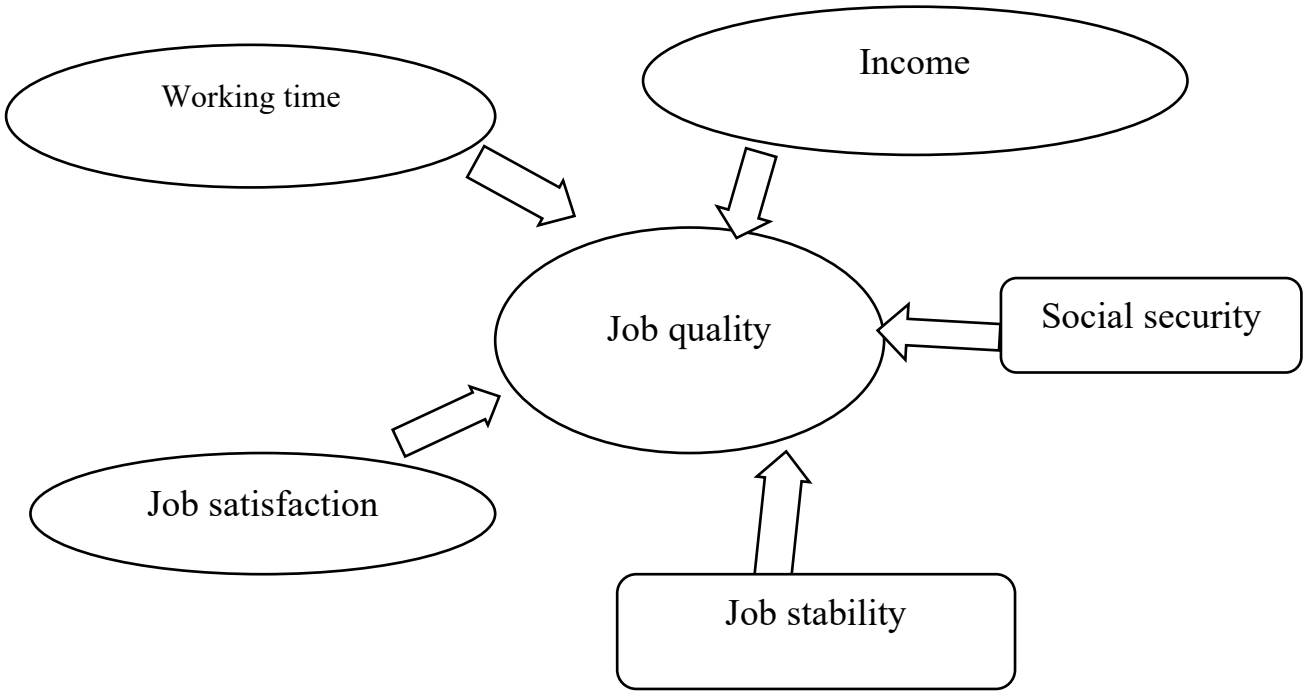
- **Theoretical perspective**

To understand job quality, our perspective is in line with not only academic, but also institutional work, which has adopted a multidimensional approach to job quality (Muñoz de Bustillo et al., 2009; Boulet, 2013; Ramos et al., 2015; Deguilhem, 2018; Mamadou, 2021).

[3] Survey on the Dynamics of Integration for Young People.

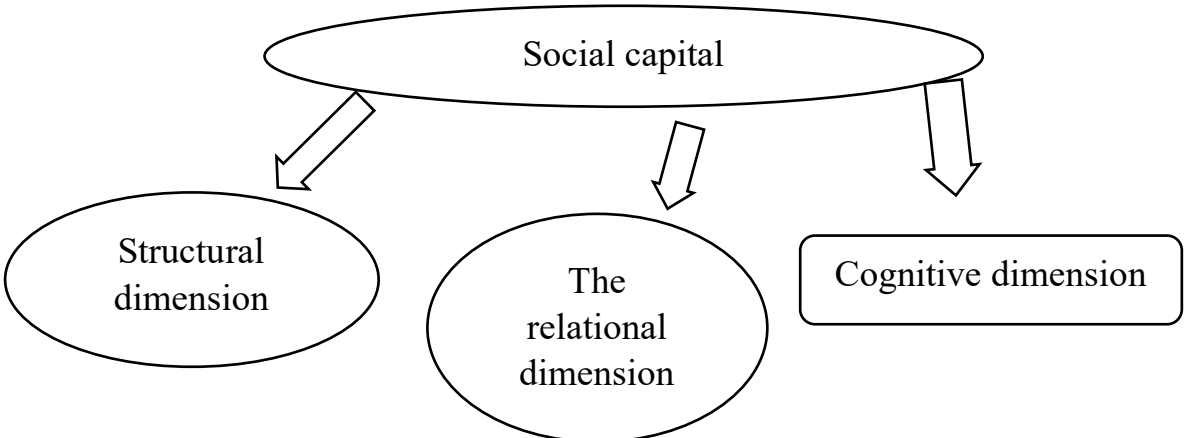
Based on this premise, we consider that job quality cannot be measured in terms of a single indicator (or dimension), as can be seen in some works, which only take wages into account (Macias et al., 2008; Dwyer and Wright, 2014; Lapointe and Bach, 2016) or else satisfaction (Clark, 2005). Our approach suggests that job quality is defined by a set of job characteristics that contribute to the overall well-being of the worker (OECD, 2014). This general well-being includes both an objective and a subjective dimension. The definition of job quality used in our study suggests that a quality job is one that meets the following criteria: (i) remuneration (monthly wage), (ii) job satisfaction, (iii) working time (working hours), (iv) job stability (permanent and fixed-term contracts), and (v) social security (NSSF membership). We thus follow in the same vein as Anker et al (2003); Cloutier-Villeneuve (2010).

Figure 1: Conceptual diagram of job quality



Source: Authors

Figure 2: Conceptual diagram of social capital



Source: Authors

Following this theoretical positioning of our approach, we will now explain our methodological approach to operationalizing job quality.

- **Approaches to measuring job quality and social capital**

The literature on the measurement of job quality and social capital identifies two approaches to measurement: the unidimensional approach and the multidimensional approach. With regard to job quality, the first approach generally chooses to focus either on aspects such as salary (Fernandez-Macias, 2012; Lapointe and Bach, 2016), on the individual's self-reported satisfaction with the job held or the satisfaction expressed with job characteristics (Clark, 2005; Davoine and Erhel, 2007; Muñoz de Bustillo et al, 2011). As for social capital, it is measured just in terms of one's relative position in one's social network and the properties derived from it (Nahapiet and Ghoshal, 1998; Arribas and Vila, 2010). However, this one-dimensional approach suffers from a number of limitations. Firstly, it does not take into account all aspects of the phenomenon, thus providing a limited measure. Secondly, it does not allow for international and temporal comparisons.

The second approach measures job quality and social capital along several dimensions. Many authors adopt this second multidimensional or synthetic approach (Burt, 1992; Onyx and Bullen, 1998; Casanueva and Gallego, 2010; Morres et al., 2011; Davoine, 2008; Cloutier, 2010; Boulet, 2013; Deguilhem, 2018; Kponou and Kamga, 2019; Mamadou, 2021). In this study, we adopt this second multidimensional approach, which leads to the construction of a composite indicator of job quality (CIQEC[4]) in Cameroon. The choice of this multidimensional approach stems from a certain pragmatism in the face of a complex and multifaceted phenomenon (Guergoat-Larivière and Marchand, 2012). Indeed, compared with the unidimensional approach, the advantage of the multidimensional approach lies in the fact that it is practical for making comparisons between groups both in time and space on the labor market. Moreover, not only does it provide a better assessment of the overall job quality

[4] Composite Index of the Quality of Employment in Cameroon.

situation, it also has the merit of reflecting the contextual reality of the phenomenon under study.

3.2 Measuring job quality and social capital: building job quality and social capital indices in Cameroon

The construction of the social capital index and the CIQEC follows an eight-step process published by the Organisation for Economic Cooperation and Development (OECD, 2008) and presented below.

Step 1: selecting and measuring dimensions

As specified in the conceptual framework set out in Figure 1, job quality among the employed is apprehended through five specific dimensions: remuneration, job stability, working hours, social protection and job satisfaction. Similarly, social capital is assessed through three dimensions: structural, relational and cognitive.

In the end, 11 variables representing 5 dimensions of job quality and 21 variables representing the 03 dimensions of social capital were mobilized, as shown in Tables 1 and 2 below.

Table 1: Overview of job quality dimensions and indicators

Dimensions	Variables used	Detail	Codage
Remuneration	Monthly wages	Lower quartile[5]	1-0
		Quartile 2[6]	1-0
		Quartile 3[7]	1-0
		Higher quantity[8]	1-0
Working hours	Working hours	Less than 30 h	1-0
		30 to 40 h	1-0
		More than 40 h	1-0
Job satisfaction	Satisfaction with employment in general	Satisfied	1-0
Employment stability	Type of employment contract	- PC[9] - FTC[10]	1-0

[5] Wage of less than 41 875 Fcfa (considered to be the minimum wage from 21 March 2023).
[6] Salary between 41 875 Fcfa and 76 000 Fcfa.
[7] Salary between 76 000 Fcfa and 148 000 Fcfa.
[8] More than 148000 Fcfa.
[9] Permanent Contract.
[10] Fixed-Term Contract.

Social protection	NSSF[11] membership	-	Affiliated	1-0

Source: Author based on CHS 4 data.

Table 2: Overview of social capital indicators and dimensions

Dimensions	Indicateurs	Codage	Authors
Structural	Institutional confidence (economic, decentralisation)	1-0	Onyx and Bullen, 1998; Kloman-Kouakou et al., 2020 Nissen and Jarley, 2005 Zukewich and Norris, 2005 Moore et al., 2010
	Trade union membership	1-0	
	Religious commitment	1-0	
	Association membership	1-0	
	Digital social networks (mobile phone, Internet)	1-0	
Relationnal	Personal relationship	1-0	Granovetter, 1973 ; Yogo, 2013 Piracha et al., 2014 ; Granovetter, 1973
	Help (friend, NGO[12], neighbour, family)	1-0	
	Strong bond (head of household, spouse, brother/sister, son/daughter, grandson/granddaughter, niece/nephew)	1-0	
Cognitive	Language (French, English, Arabic and mother tongue)	1-0	Sirvin, 2001 Nahapiet and Ghoshal, 1998

Source: Author, based on data from CHS 4, 2014.

Step 2: Choice of analysis model for dimension weighting

Our aim in constructing the two composite indicators is to establish an overall job quality and social capital score for each employed worker in our sample. This score is obtained from the answers provided by the worker on each of the dimensions we have selected. From this point of view, the challenge remains how to determine the weight of each dimension in the calculation of the overall score, hence the use of a weighting method. Thus, following Moore (2011), Cloutier-Villeneuve and Saint-Frard (2015) and Mamadou (2021), we adopt the factorial method of multiple correspondence analysis (MCA) as our weighting approach. We chose this method because it appears to be free of any value judgments (Mamadou, 2021). Thus, as our variables are essentially dichotomous, MCA was used.

Step 3: Statistical analysis

In our definition of job quality and social capital, we have mobilized several dimensions whose relevance has been justified from a theoretical point of view. However, this does not guarantee that all these dimensions remain empirically relevant. Thus, in order to retain only the most relevant indicators or dimensions, it is recommended that we carry out two MCA, one exploratory and the other confirmatory. However, as Tables 1 and 2 show, both MCA support the relevance of the two axes selected. With regard to job quality, table 3 show that axis 1 explains 51.19% of the information and axis 2 explains 46.30%, for a total of 97.49%. With regard to social capital, 49.92%, 40.34% and 5.01% of information is explained by axes 1, 2

[11] National Social Security Fund.
[12] Non-Governmental Organisation.

and 3 respectively. These first three axes account for precisely 95.27% of the total variance, and their respective Cronbach's alpha coefficients are around 0.89, 0.738 and 0.49 (see table 4). Thus, most of the information is contained in axes 1 and 2. All other axes provide only “white noise”, to use the commonly used expression.

Table 3: Axes and percentage of inertia for the job quality indicator

	Results			Alpha de Cronbach
Axes	Inertie ppale	% de L’inertie	% cumulé	
1	0.2375806	51.19	51.19	0.76
2	0.2148976	46.30	97.49	0.67
Total	0.4641171	100.00		

Source: Authors

Table 4: Axes and percentage of inertia for the social capital indicator

Unadjusted results (BURT)				**Adjusted earnings (AER)**			**Alpha de Cronbach**
Axe	**Inertia principal**	**% Percent**	**% Cumul Percent**	**Inertia principal**	**% Percent**	**% Cumul percent**	
dim 1	0.029	46.160	46.160	0.037	49.920	49.920	0.89
dim 2	0.019	29.870	76.040	0.030	40.340	90.260	0.73
dim 3	0.002	2.620	78.660	0.004	5.010	95.270	0.49
dim 4	0.001	1.050	79.710	-	-	100	
dim 5	0.000	0.460	80.170	-	-		
dim 6	0.000	0.360	80.530	-	-		
dim 7	0.000	0.130	80.660	-	-		
dim 8	0.000	0.070	80.730	-	-		
dim 9	0.000	0.020	80.750	-	-		
dim 10	0.000	0.000	80.750	-	-		
dim 11	0.000	0.000	80.750	-	-		
Total	0.062	80.750	100.000	0.075	95.270		

Source: Authors

Step 4: Selection of relevant axes

Benzékri (1979) recommends adjusting the eigenvalues to detect the number of relevant factors (or axes) after performing the MCA on the BURT table. This is because, in the Burt table, information is duplicated - in other words, a modality crosses itself. Thus, the axes for which we need to adjust the eigenvalues (or inertias) are those with an eigenvalue

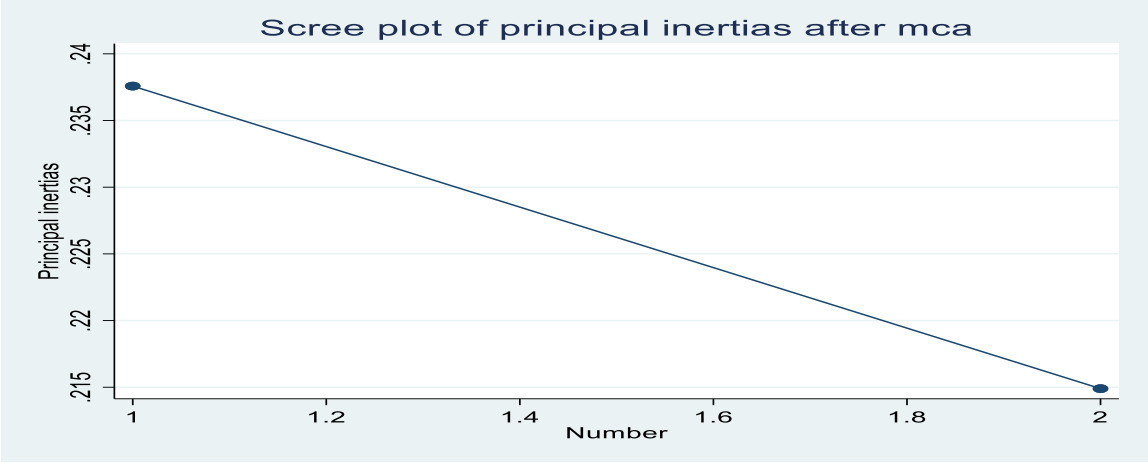
greater than 1/p (where p is the number of variables). Thus, for all axes with eigenvalues greater than 1/p, the formula for adjusting the inertia percentage proposed by Greenacre and Blasius (2006) is written as:

$$\lambda_s^{adj} = \left(\frac{Q}{Q-1}\right)^2 \left(\lambda_s - \frac{1}{Q}\right)^2 \qquad (1)$$

Where: λ_s^{adj}: adjusted eigenvalue or inertia λs: eigenvalue or inertia (from unadjusted MCA), Q: number of variables.

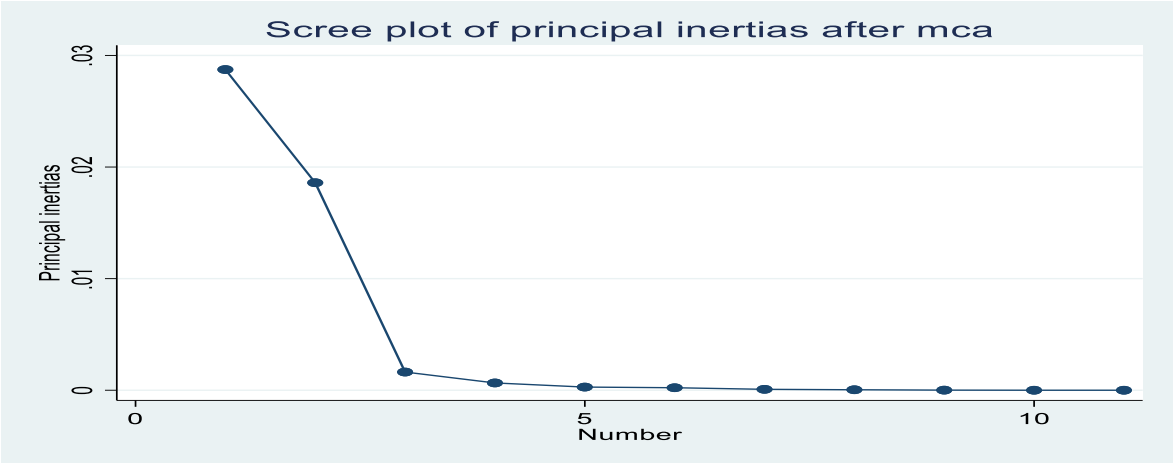
In order to retain only the most significant axes in the construction of our synthetic indicator, we used Cattell's Scree Test (Cattell, 1966) and Cronbach's Alpha. Figure 3 below shows the results of Cattell's Scree test, suggesting that we retain only the first two axes to synthesize the information provided by the CEQI indicators. This choice is confirmed by the values of Cronbach's Alpha coefficients (Tables 1 and 2), which are higher than the average value (0.6) adopted by certain authors in the literature. These two criteria therefore validate the reliability of our indices.

Figure 3: Cattell's Scree test of the job quality index



Source: Authors

Figure 4: Cattell's Scree test of the social capital index



Source: Authors

Step 5: Contribution of modalities

Having determined the number of axes to be retained, and having ascertained the degree of internal consistency of our indicators, we need information on the modalities in order to calculate our composite indicator of job quality.

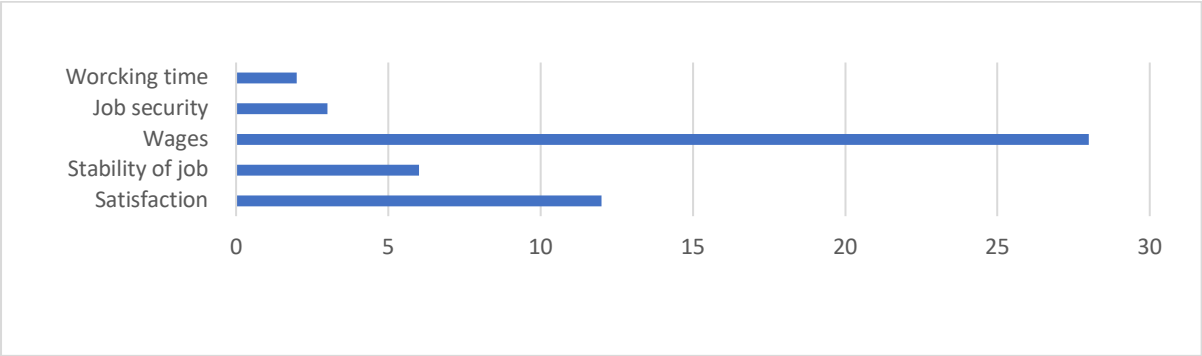
Table 5: Modality information MCA results

	Overall			**Dimension 1 (Axis 1)**			**Dimension 2 (Axis 2)**		
Indicators	Mass	Qualité	Inertie	Coord	Sqcorr	Contrib	Coord	Sqcorr	Contrib
Works less than 30 hours a day (yes)	0.025	0.761	0.008	0.197	0.064	0.001	-0.687	0.698	0.012
Works 30 to 40 hours a day (yes)	0.015	0.597	0.005	0.123	0.022	0.000	-0.658	0.575	0.006
Works more than 40 hours a day (yes)	0.051	1.000	0.200	-0.605	0.048	0.019	2.842	0.952	0.411
Total contribution per hour						0.020			0.429
Affiliation NSSF (yes)	0.009	0.006	0.008	-0.091	0.005	0.03	0.041	0.001	0.01
Total employment security contribution 0.03									0.01
Lower Quartile (yes) (R<41875f)	0.011	0.845	0.006	-0.935	0.786	0.009	-0.269	0.059	0.001
Quartile2 (yes) (41875<R<76000)	0.008	0.815	0.005	-0.974	0.811	0.008	-0.063	0.003	0.000
Quartile3 (yes) (76000<R<148000)	0.006	0.768	0.004	-0.957	0.756	0.006	-0.124	0.011	0.000
Higher Quatile (yes) (R>148000)	0.066	1.000	0.137	1.974	0.960	0.257	0.426	0.040	0.012
Total contribution wages						0.28			0.013
FTC (yes)	0.004	0.088	0.001	-0.185	0.083	0.03	0.049	0.005	0.02
PC (yes)	0.014	0.039	0.007	-0.176	0.032	0.03	0.086	0.007	0.02
Total employment contract contribution						0.06			0.04
Satisfied with job (yes)	0.063	0.217	0.000	0.013	0.122	0.12	0.012	0.095	0.004
Total contribution satisfaction						0.12			0.004

Source: Authors

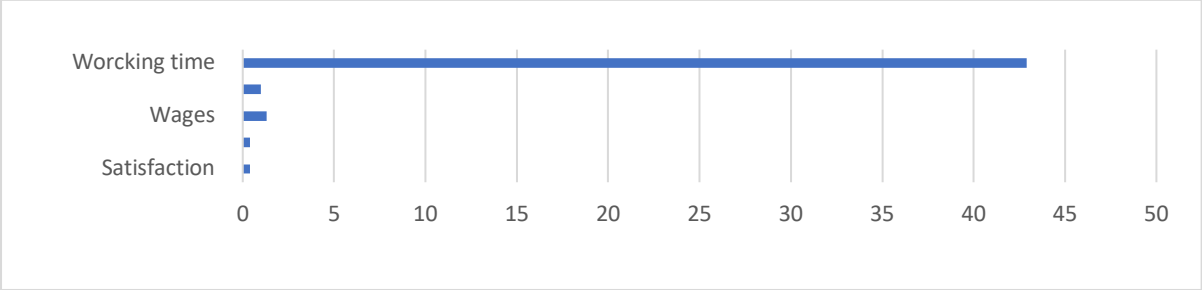
Table 5 above shows that the most important information for calculating the CEQI remains the contributions of the modalities. Indeed, by contribution we mean the impact of the modality on the definition of the axis, in other words, its contribution to the total inertia expressed as a percentage. However, it should be noted that the total contributions for each axis correspond to 100%. So, for a given variable, its impact on the definition of an axis is equal to the sum of the contributions of its modalities for that axis.

Figure 5: Contribution of indicators to the definition of Axis 1



Source: Authors

Figure 6: Contribution of indicators to the definition of Axis 2



Source: Authors

An axis can be explained by its high-contribution modalities. Income, job stability, job satisfaction and job security are the dimensions that best explain the first axis (figure 5), while working time best explains the second axis (figure 6).

Step 6: Calculating the indicator

Now that we have the contributions of each of the modalities of our various selected indicators and the axes to be retained, we can now construct our indicators, in other words, calculate the job quality and social capital score for each individual in our study population. We use Asselin (2002) notation, which appears in the ISQ report (Cloutier and Robinson, 2015) and is taken up by Mamadou (2021).

$$\text{Composi Index}_i = \frac{1}{K}\sum_{k=1}^{K}\sum_{jk}^{jk} w_{jk}^{k}\, I_{i,jk}^{k} \qquad \textbf{(2)}$$

Where the Composi Index represents either the composite index of job quality or the composite index of social capital; K= number of variables in the MCA; w_{jk}^{k} is the contribution of modality j of variable k; $I_{i,jk}^{k}$= binary coding (0 if the individual does not take modality j of variable k and 1 when he or she does). This formula gives us a job quality and social capital score for each employed person. These scores range from -1.40 to 1.70. To facilitate analysis, these scores were weighted in the interval (0 ;1). To obtain values between 0 and 1, these indices are normalized by the max-min method, whose formula is:

$$\text{Composi Index}_i = \frac{\text{Actual Value} - \text{Minimum Value}}{\text{Maximum Value} - \text{Minimun value}} \qquad \textbf{(3)}$$

This normalization process places the index values in an interval that is easier to interpret, without degrading the index content. It modifies the order of magnitude of the maximum values taken by the index and thus makes it possible to set minimum and maximum values (Goujon, 2008). In the end, we obtain continuous indices of job quality and social capital for which the value 0 corresponds to the worst possible job quality and social capital; and 1 to the best possible job quality or social capital, and the average of this index is 0.45, i.e., 45% for job quality and 97% for social capital.

3.3 Model and estimation technique, data, variables and descriptive statistics

3.3.1 Model and estimation technique

Several empirical models can be used to highlight the relationship between social capital and job quality. These include parametric, semi-parametric and instrumental models. The choice of one or the other depends on the prevailing econometric problem. Parametric models are often used when we have theoretical knowledge or specific assumptions about the functional form of the relationship under study. Semi-parametric models, on the other hand, are often used when we wish to capture the complexity of economic relationships without fully committing to a specific functional form. Instrumental models are used to solve endogeneity problems in econometric models. In the case of our study, the endogenous nature of social capital directs our choice towards instrumental models (Wooldridge, 2002), making the first two categories of models inappropriate. The choice of this model is justified by the double collinearity that exists between social capital and job quality.

$$y_i = \tau_0 + \omega x_i + v_i \quad (4)$$
$$with \quad i = 1 \ldots N$$

Where, y_i is the dependent variable (index of job quality), τ_0 is a constant, ω is an N × 1 vector of estimated parameters, **i** is the individual (employee), and xi is the observation (i) on K explanatory variables (control variables) and v_i represents the error term. Social capital is endogenous to job quality insofar as it depends on job quality and several other characteristics. In fact, just as social capital can explain job quality, job quality can also explain social capital. There are at least two reasons for this double causality: On the one hand, the fact that an individual has social capital can guarantee him or her a quality job on the labor market (Granovetter, 1973; Deguilhem et al., 2019; Kloman-Kouakou et al., 2021). From this point of view, social capital is seen as a determinant of job quality. On the other hand, the fact that an individual is inserted in a good-quality job enables him or her to forge relationships with collaborators and thus accumulate social capital. In fact, job quality is a determinant of social capital. This potential endogeneity of social capital with respect to the error term necessitates the use of instrumental variable (IV) methods such as the two-stage least squares model (MC2E) to obtain convergent parameter estimates.

In this study, drawing on empirical literature, population density and average social capital per household were found to be strongly correlated with the use of social capital (Coleman, 1980; Yogo, 2013). Population density is defined as the ratio of the population of the area where an individual's household is located to the total population. Similarly, average social capital per household was obtained by relating the composite index of social capital (ICCS) to household size. These variables have no effect on the qualification of the workforce, thus corroborating the conditions for the validity of a good instrument set out by Wooldridge (2002). In this respect, density and average social capital per household are good instruments.

To estimate equation (4), it is necessary to estimate a social capital equation and then integrate social capital into the job quality equation. Specifically, we need to estimate the following structural equation system:

$$\begin{cases} y_{ai} = \tau_{a0} + \omega_a x_{ai} + v_{ai} & (5) \\ y_{bi} = \tau_{b0} + \theta y_{ai} + \omega_b x_{bi} + v_{bi} & (6) \end{cases}$$

In this equation system, the first equation estimates social capital and the second estimates job quality. i is represents the individual, y_{ai} and y_{bi} represent social capital (social capital index) and job quality (job quality index) respectively, τ_{a0} and τ_{b0} are the constants of the two equations, x_{ai} and x_{bi} represent the vectors of parameters to be estimated (instrumental

varaibles and control variables), θ represents the estimated parameter v_{ai} and v_{bi} are the error terms. The y_{bi} factor depends on the y_{ai} factor, thus creating endogeneity and implying that the system's error terms are correlated.

The instrumental variables method allows us to estimate such a system in reduced form. While it allows us to take account of the endogeneity of certain variables, it is unable to correct the problems associated with the heteroscedasticity of the variance of the system's error. There are methods that can solve both problems at the same time, although this depends on the identification of the system. If the equation is correctly identified, indirect least squares (ILS) or two-stage least squares (2ls) are applicable. On the other hand, only 2ls is applicable if the model is over-identified (Bourbonnais, 2015). In our case, the 2sl method is appropriate. Indeed, the 2sl method is designed for estimating structural equations. It is also appropriate when the dependent and independent variables are quantitative and non-truncated. In the implementation of this method, all dependent variables are considered as endogenous and correlated with the error terms of the equation system, while variables declared as exogenous are treated as instruments of the endogenous variables (StataCorp LP, 2009). The 2ls method combines the instrumental variables method to correct for problems of endogeneity and double causality between dependent and independent variables.

3.3.2. Data source, variables and descriptive statistics

The data mobilized to achieve the objective of these studies come from the fourth Cameroon household survey (CHS 4), carried out in 2014 by Cameroon's Institut National de la Statistique (INS). The final sample comprises 10,303 households and 46,560 individuals interviewed in 2014. For our work, we selected a sample of individuals, in particular those in employment aged 15 and over. This choice is based on the fact that it is representative of the entire population of individuals of working age. In addition, this database provides relevant information on the dimensions of social capital, but also on the dimensions of job quality, enabling us to study the link between the two concepts.

The dependent variable is job quality. Indeed, as mentioned above, it refers to a multidimensional concept. Thus, it is measured by a synthetic indicator constructed using Multiple Component Analysis (MCA), following the example of Cloutier-Villeneuve and Saint-Frard (2015); Kponou and Fomba, (2019); Kamala et al. (2021), Mamadou (2021) and N'Grantier (2022). The independent variable is social capital. Indeed, given its multidimensional and contextual nature, it is apprehended here following Moore et al. (2010) by the index, in particular the composite index of social capital (CISC) that we constructed

earlier. The database used allows us to identifier several variables likely to explain job quality. These are: gender, age, household size, marital status of the head of household, level of education, sector of activity and socio-professional category. All these variables are suggested by the dominant literature in studies of job quality (Cloutier-Villeneuve et al., 2011; Cloutier-Villeneuve and Saint-Frard, 2015; Kamala et al., 2021; Mamadou, 2021; N'Grantier, 2022).

3.3.3 Descriptive statistics

Table 6: Descriptive statistics

Variables	Obs	Mean	Stand_Dev	Min	Max
Job quality (Index)	18036	0.451	0.228	0	1
Social capital (Index)	18036	0.967	0.008	0	1
Average S.C per household	18036	0.266	0.237	0	1
Population density	18036	0.047	0.028	0	1
Ln of household size	18036	1.568	0.705	0	3.401
Man	9,448	0.524	0.499	0	1
No schooling	3,571	0.198	0.399	0	1
Primary	6,816	0.378	0.485	0	1
Secondary	6,385	0.354	0.478	0	1
Higher	1,263	0.07	0.255	0	1
Managers	1,273	0.071	0.256	0	1
Skilled	2,078	0.115	0.319	0	1
Manual workers	14,685	0.814	0.389	0	1
Primary sector	7,962	0.441	0.497	0	1
Industrial sector	2,751	0.153	0.36	0	1
Commercial sector	2,951	0.164	0.37	0	1
Service sector	4,365	0.242	0.428	0	1
Formal sector	2,170	0.12	0.325	0	1
Informal sector	15,866	0.88	0.325	0	1
Coupl	10,095	0.56	0.496	0	1
Young people (aged 15-35)	8,822	0.489	0.5	0	1
Seniors (over 35)	8,528	0.473	0.499	0	1
Urban	8,226	0.456	0.498	0	1

Source: Author based on CHS 4 data.

Table 6 shows that 45.1% of employed people in the Cameroon labor market have a quality job. Similarly, the average use of social capital by these employed workers is 96.7%. The majority of these workers are men (52.4%), compared with women (48.6%). Moreover, 19.8% of these workers have no schooling, compared with 37.8%, 35.4% and 7% with primary, secondary and higher education respectively. In addition, 81.4% of workers are manual laborers, compared with 7.1% and 11.5% respectively for managers and skilled workers. With regard to sector of activity, Table 6 shows that the primary sector absorbs the bulk of the workforce, i.e., 44.1%, against 15.3%, 16.4% and 2.42% respectively for the industrial, commercial and service sectors. Similarly, 88% of these employed people work in the informal

sector, compared with only 12% in the formal sector. In terms of age, the majority of employed workers are relatively young, namely 48.9% versus 47.3% of seniors. Similarly, 49.8% work in urban areas, compared with 51.2% in rural areas.

4. Results and robustness analysis

This section first reviews the preliminary OLS results**,** then the results of the main model and finally the robustness analysis**.**

4.1 Preliminary results

Table 7 below presents the results of the OLS model on the effects of the use of social capital on job quality.

Table 7: Results of the Ordinary Least Squares (OLS) model

Variables	**MCO**
	Job quality (index)
Social capital (index)	-3.153***
	(0.291)
Logarithm household size	0.004*
	(0.002)
Man	0.053***
	(0.003)
Primary	-0.048***
	(0.004)
Secondary	-0.075***
	(0.005)
Higher	-0.093***
	(0.008)
Frames	0.086***
	(0.006)
Qualified	0.155***
	(0.006)
Industrial sector	0.027***
	(0.005)
Commercial sector	0.038***
	(0.005)
Service sector	0.041***
	(0.005)
Formal sector	0.182***
	(0.006)
Couple	0.018***
	(0.003)
Youg (15-35 ans)	0.053***
	(0.005)
Seniors (over 35)	0.049***
	(0.006)
Urban	0.017***
	(0.004)
Constante	3.383***
	(0.285)

Observations	18035
R-squared	0.32

Standard deviations are shown in brackets
**** p<.01, ** p<.05, * p<.1*

Source: Author based on CHS 4 data

Table 7 shows that the effect of social capital on job quality is negative and statistically significant at the 1% level. This result means that the use of social capital deteriorates the job quality of employed people in Cameroon. Household size, sector of activity, socio-professional category, informality, urban residence and gender all have a positive and significant effect on job quality at the 1% level, while education has a negative and significant effect on job quality at the 1% level.

Although these results corroborate the theory of the perverse effects of social capital defended in the literature (Rubio, 1997; Portes, 1998), there is every reason to believe that it is tainted by bias due to the endogenous nature of social capital, which endogeneity is not taken into account by the OLS method. As a result, OLS results are biased. This potential endogeneity of social capital in relation to the error term necessitates the use of instrumental variable (IV) methods such as the double least squares model to obtain convergent parameter estimates. To check for the presence of endogeneity bias, we instrument the social capital variable. We then test the null hypothesis of the absence of endogeneity bias, based on the probability of the Fisher test. Our various estimates suggest that, at the 1% threshold, we cannot retain the null hypothesis, and thus validate the presence of the endogeneity bias and the relevance of the instrumental variable method according to Wooldridge (2002). We can therefore foresee the validity and robustness of the results obtained from instrumental variable regression (2ls).

4.2. Presentation of double least squares results

In the following, we present the econometric evaluations of the effects of social capital on job quality, as estimated by the double least squares (2SLS) method.

Table 8: Estimation of the double least squares model

Equation	**Obs**	**Parms**	**R^{2aj}**	**F-Stat**	**P**
Job quality (Index)	18,035	16	0.7078	511.82	0.000
Social capital (Index)	18,035	6	0.6402	2363.11	0.000
Job quality equation					
	Coef.		**St. Err.**	**t-value**	**p-value**
Social capital (index)	**-8.446*** **		2.452	-3.44	0.001
Logarithm household size	0.015***		0.004	3.07	0.002
Man	0.045***		0.005	8.30	0.000
Primary	-0.07***		0.011	-6.47	0.000
Secondary	-0.118***		0.021	-5.64	0.000

Higher	-0.142***	0.024	-5.85	0.000
Managers	0.078***	0.008	10.03	0.000
Qualified	0.146***	0.007	20.64	0.000
Industrial sector	0.018***	0.006	3.01	0.003
Commercial sector	0.028***	0.006	4.41	0.000
Service sector	0.029***	0.007	4.07	0.000
Formal	0.17***	0.008	20.38	0.000
Single	0.01	0.011	0.89	0.376
Young people (aged 15-35)	0.025	0.016	1.56	0.12
Seniors (over 35)	60.01	0.02	0.50	0.617
Urban	0.009	0.005	1.64	0.101
Constant	8.564***	2.397	3.57	0.000
Equation of social capital				
Average social capital per household	0.008***	0.0001865	-44.54	0.000
Density of population	0.065***	0.0139291	-4.71	0.000
Man	-0.002***	0.0000922	-26.72	0.000
Primary	-0.004***	0.0001259	-32.17	0.000
Secondary	-0.011***	0.0001297	-82.07	0.000
Higher	-0.015***	0.0002004	-75.63	0.000
Married	-0.007***	0.0001033	-65.91	0.000
Logarithm household size	0.002***	0.000062	44.92	0.000
Constant	0.979***	0.0001383	7075.09	0.000

Source: Author based on CHS 4 data.

Table 8 shows that the estimated system of equations is robust, with Fisher statistics equal to 511.82 for the first equation and 2363.11 for the second equation. These statistics have a probability of zero, which implies that the parameters of both equations are significantly different from zero and that there is no identification problem. Indeed, an identification condition is that the number of exogenous variables exceeds the number of endogenous variables. Similarly, the R2 of the two equations are 70.78% and 64.02% respectively, reflecting the overall significance of our model. The instruments used are therefore valid. It is therefore appropriate to comment on the results obtained.

With regard to the job quality equation, the results show that the use of social capital significantly reduces job quality by 8.46%. There are at least four reasons for this result. Firstly, the abundance of social capital available to each individual leads to a deterioration in the efficiency of this capital in acquiring better-quality jobs. Secondly, in our context, characterized by the predominance of the informal sector, workers are much more concerned with keeping their jobs than with joining trade union associations to defend better working conditions, safety at work and compliance with pay regulations guaranteeing good-quality employment. Thirdly, in the context of developing countries, very few people invest in the maintenance of their social capital; which leads to the fact that workers do possess social capital, but this is generally of poor quality, likely to have a rather perverse effect on job quality. This argument was raised by Wahba and Zenou (2005), who showed that, compared with the analyses of Colvo-Amergol and Jackson (2004) in the context of developing countries, taking into account the quality

dimension of social capital is undeniable in our context, as it is necessary to see the positive effects of social capital in terms of employment. Fourthly, in a context such as ours, where the cult of the diploma is predominant, social capital brings no distinct advantage, as appointments or recruitment are made exclusively on the basis of candidates' diplomas. So social capital isn't always useful, especially in labor markets that rely heavily on the signaling role of degrees to match people to jobs and allocate rewards.

This result had already been found by Addison and Portugal (2002), who found that workers who found jobs via social capital earned less, thus occupying low-quality jobs. More recently, Kramarz and Skans (2014) show in the Swedish context that lower-level graduates were more likely to find employment via their parents but with a wage penalty. Similarly, Plug et al (2018) find that parental social capital has no effect on their children's job quality in the labor market. However, this result thus calls into question the argument that the use of social capital offers better wages, better employment conditions, career development opportunities, better quality of life, fulfillment, satisfaction and hence good quality employment put forward by Penard and Poussin (2006) and shared by several authors. In fact, our results are at odds with the conclusions of Cappellari and Tatsiramos (2015) in the context of developed economies and more specifically with those of Brown et al. (2016), Hensvik and Skans (2016) in Sweden, Dustmann et al. (2016) in the German context.

- Effects of socio-demographic variables on job quality

With regard to the socio-demographic determinants of job quality, the results in Table 8 show that job quality increases significantly by 1.5% and 4.5% respectively with household size and being male, all else being equal. This means that workers from larger households enjoy a higher level of job quality than those from smaller households. Similarly, man workers have better-quality jobs than their female counterparts. These results can be explained by the fact that household size generally rhythms with social and family burdens. As a result, workers from larger households have greater motivation and commitment to work, which predisposes them to better pay, a better working environment and, consequently, good-quality jobs. Moreover, men are generally more available than women, who have to reconcile work and family life, resulting in reduced participation in the labor market. This high availability of men in the labor market predisposes them to good-quality jobs. This result corroborates that found by N'Gratier (2022) in the Ivorian context.

However, Table 8 shows that the effect of education on job quality is negative and statistically significant at the 1% level. In other words, whether the worker has primary,

secondary or tertiary education, job quality decreases by 7%, 11% and 14% respectively. Although this result seems counter-intuitive insofar as job quality is strongly dependent on education level, it can be explained by at least two reasons. On the one hand, our context is characterized by the failure of the education system to provide the skills and knowledge needed to meet the demands of the labor market. Educational programs can be disconnected from real market needs, resulting in a mismatch between graduates' skills and available positions. This can lead to a surplus of graduates in some fields and a skills shortage in others, damaging overall job quality. On the other hand, developing countries like Cameroon may face structural challenges that limit their ability to generate quality employment opportunities for their educated population. Problems such as slow economic growth, low economic diversification and lack of investment in labor-intensive sectors can limit job opportunities for graduates. This can lead to over-qualification and under-utilization of skills, contributing to a deterioration in job quality. This result calls into question capital theory, which establishes a positive relationship between education and job quality.

- Effects of job characteristics on job quality

With regard to the determinants of job characteristics, the results in Table 8 show that job quality increases significantly by 7.8% and 14% respectively with being a manager or a skilled employee. In other words, compared with labourers, managers and skilled workers benefit from good job quality. This result can be explained by the fact that managers and skilled workers are generally competent employees and therefore more demanding in terms of remuneration and conditions of employment, which predisposes them to good-quality jobs compared to their labourer counterparts, most of whom are unskilled and less demanding.

Furthermore, compared to primary sector workers, being employed in the formal, industrial, commercial or service sectors increases job quality by 17%, 1.8%, 2.8% and 2.9% respectively. This other result can be explained by at least two reasons: On the one hand, jobs in the formal, industrial, commercial and service sectors generally require a higher level of qualification. Workers in these sectors have often undergone specialized training or acquired specific technical skills, giving them access to better-paid, more stable jobs. This thesis is supported by human capital theory (Becker, 1964; Mincer, 1974). On the other hand, jobs in the formal sectors generally offer better working conditions, such as regular working hours, safe working environments, social benefits and opportunities for career progression. The primary sector, on the other hand, can be more precarious and exposed to the elements. This result contrasts with that found by who shows that a comparison of job quality based on

indicators of working conditions, job satisfaction and pay reveals no simple dichotomy between the primary sector and other sectors. There are good and bad jobs in all of them, and the ranking of sectors at both general and more detailed levels varies according to the dimensions of quality selected.

- Effects of individual characteristics on social capital

In relation to the social capital equation, the results in the table show that household size has a positive and significant influence at the 1% threshold on the use of capital. This means that the higher the household size, the higher the use of capital. However, the table shows that gender, education and marital status have a negative and significant influence on the use of social capital.

Specifically, Table 8 shows that education has a significant negative impact on the use of social capital by employed workers in Cameroon. Indeed, compared to those without schooling, the fact of having a primary, secondary or higher level of education significantly reduces the use of social capital by 2%, 11% and 15% respectively. This result shows that the use of social capital by Cameroonian workers decreases with the level of education. In other words, the more education a worker has, the less capital he uses. There are at least two reasons for this result: Firstly, people with less education may have wider or more diversified social networks. These networks may be formed in community contexts where relationships are closely interwoven, such as neighborhoods or religious communities. Having a wider social network may provide more opportunities to obtain support and resources or employment opportunities. Secondly, less-educated workers may face barriers to formal employment, notably due to a lack of specific qualifications or skills. As a result, they may turn to their social network for informal employment or self-employment opportunities. Social capital can enable them to find informal jobs through recommendations, connections or information shared within their network. This result corroborates the findings found by Wapot (2013) and N'Guessan (2015), who show in the Ivorian context that workers with low levels of education make greater use of social capital than the more educated.

Furthermore, Table 8 shows that, compared to women, being man reduces the use of social capital by 2%. In other words, men make less use of social capital than their female counterparts. This other result is explained by the fact that women often face obstacles and discrimination on the labour market due to cultural norms, gender stereotypes and structural inequalities. Quality formal employment opportunities can be limited for women, often relegating them to informal or low-paid jobs. To compensate for these disadvantages, women

can turn to their social capital, which includes professional networks, family relationships and community ties, to access employment opportunities. On the other hand, in some cases, man networks tend to be more formal as men are more likely to be employed, while female networks tend to be more informal and family-centred (Moore, 1990). In this vein, Putnam (2000) already noted that in the USA, women are more socially engaged than men in all job categories (full-time, part-time and unemployed). Those who hold part-time jobs (especially if they have found the balance they desire between work and family) tend to be more socially engaged than others. In some cases, man networks tend to be more formal due to the fact that men are more often employed, while female networks tend to be more informal and family-centric (Moore, 1990). More recently, Wapot (2013) arrives at the same results in the Ivorian context.

Another important result is the negative and statistically significant effect of marital status on the use of social capital at the 1% threshold. Indeed, the use of social capital is a decreasing function of the use of social capital. Compared to their married counterparts, being married reduces the use of social capital by 7%. This other important result can be explained by the fact that single people not yet under the yoke of family responsibility are more flexible and therefore often much more driven by feelings of professional and social accomplishment, predisposing them to a more marked recourse to social capital. This result is in line with that found by Yogo (2013) in the same context.

4.3. Robustness analysis

This robustness analysis will be carried out in two ways. On the one hand, by changing the estimation method, and on the other, according to the heterogeneity of certain variables.

4.3.1 Estimation using the triple least squares (3ls) model

To assess the robustness of our results, we use the method of changing the estimation method. Thus, we estimate the effects of social capital on the job quality of employed workers using the triple least squares (3ls) method. Compared with the double least squares method (2ls), this method has the advantage of correcting for any heteroscedasticity that may exist. In fact, it is appropriate for gaining a better insight into the robustness of our previously found results.

Table 9: Effects of social capital on job quality using the method of least-squares triples.

Equation	Obs	Parms	$R2^{aj}$	F-Stat	P
Job quality	18,035	16	0.6950	9239.98	0.000

Social capital	18,035	6	0.5902	14184.14	0.000
Job quality equation					
	Coef.		**St. Err.**	**t**	**P>|t|**
Social capital	-8.454***		2.45	-3.45	.001
Logarithm household size	0.009*		0.005	1.77	.076
Man	0.043***		0.005	7.85	0.000
Primary	-0.07***		0.011	-6.47	0.000
Secondary	-0.126***		0.021	-5.99	0.000
Higher	-0.161***		0.024	-6.62	0.000
Managers	0.084***		0.008	10.77	0.000
Skilled	0.152***		0.007	21.55	0.000
Industrial sector	0.023***		0.006	3.87	0.000
Commercial sector	0.034***		0.006	5.35	0.000
Service sector	0.037***		0.007	5.10	0.000
Formal	0.177***		0.008	21.37	0.000
Single	0.016		0.011	1.44	0.151
Young people (aged 15-35)	0.044***		0.016	2.74	0.006
Seniors (over 35)	0.035*		0.02	1.72	0.085
Urban	0.014***		0.005	2.65	0.008
Constant	8.556***		2.396	3.57	0.000
Equation of social capital					
Average social capital per household	0.008***		0.0001***	-43.55	0.000
Density of population	0.006***		0.001***	4.01	0.000
Man	-0.002***		0.0000878	-26.72	0.000
Primary	-0.004***		0.0001194	-32.18	0.000
Secondary	-0.011***		0.0001231	-82.09	0.000
Higher	-0.015***		0.000191	-75.65	0.000
Married	-0.007***		0.0000983	-65.93	0.000
Logarithm household size	0.002***		0.000062	44.92	0.000
Constant	0.979***		0.0001666	7076.46	0.000
**** p<.01,*		*** p<.05,*	** p<.1; R2 aj = R2 ajusted*		

Source: Author, based on data from CHS 4

Table 9 shows that the estimated system of equations is robust, with Fisher statistics equal to 9239.98 and 14184.14 for the first and second equations respectively. Similarly, these statistics have a probability of zero, indicating that the parameters of both equations are significantly different from zero and that there is no identification problem. Furthermore, the R2 of the model's two equations are 60.50% and 59.02% respectively, reflecting the overall validity of this model. Table 9 shows that the effect of the use of social capital on job quality is negative and statically significant at the 1% level. This result is in line with that found by the 2ls method, and therefore confirms the stability of our results. With regard to the other variables, we find that being male, young, a manager or a qualified employee, working in the formal sector or in the service sector, and living in an urban environment have a positive and significant effect on job quality at the 1% threshold. On the other hand, gender, level of education, marital status and household size are important determinants of social capital. Their effect on the use of social capital is negative and statistically significant at the 1% level.

4.3.2. Estimation according to variable heterogeneity

With regard to robustness according to variable heterogeneity, we first estimate our model according to place of residence (Table 11), since it is possible that the use of social capital is heterogeneous between rural and urban areas. This may be due to the fact that urban areas are denser in social interaction. Secondly, the model is estimated according to informality (table 12), as it is likely that informal and formal sector workers have different levels of social capital use.

Table 10: Effects of social capital on job quality, by area of residence

	Urban					Rural				
Equation	**Obs**	**Pams**	**R^{2aj}**	**F**	**P**	**Obs**	**Pams**	**R^{2aj}**	**F**	**P**
Job quality	8,226	15	0.63	312.32	0.00	9,809	15	0.462	170.29	0.00
Social capital	8,226	6	0.60	748.12	0.00	9,809	6	0.60	1304.30	0.00
Variables	Coef.	St. Err.	p-value			Coef.	St. Err.			**p-value**
Job quality equation										
Social capital	-1.763*	3.788	0.074			-3.78***	3.243			0.003
Household size	0.004	0.009	0.645			0.022***	0.005			0.000
Man	0.062***	0.007	0.000			0.034***	0.008			0.000
Primary	0.005	0.014	0.747			-0.094***	0.015			0.000
Secondary	-0.033	0.028	0.227			-0.161***	0.03			0.000
Higher	-0.066**	0.032	0.041			-0.172***	0.039			0.000
Executive	0.094***	0.011	0.000			0.034***	0.013			0.008
Qualified	0.156***	0.01	0.000			0.108***	0.013			0.000
Primary sector	0.075***	0.008	0.000			-0.001	0.008			0.907
Secondary sector	0.092***	0.008	0.000			-0.004	0.009			0.664
Third sector	0.085***	0.009	0.000			0.014	0.01			0.164
Formal	0.156***	0.011	0.000			0.204***	0.015			0.000
Single	-0.003	0.017	0.849			0.022	0.016			0.162
Young people	0.041*	0.025	0.095			0.017	0.021			0.426
Seniors	0.047	0.03	0.119			-0.01	0.027			0.706
Constant	6.814*	3.687	0.065			9.893***	3.174			0.002
Equation of social capital										
Average social capital per household	0.011***	0.0019517	0.000			0.083***	0.0027256			0.000
Density population	0.007***	0.0002442	0.000			0.006***	0.0002534			0.000
Man	-0.002***	0.000128	0.000			-0.002***	0.0001207			0.000
Primary	-0.003***	0.0002301	0.000			-0.004***	0.0001431			0.000
Secondary	-0.008***	0.0002218	0.000			-0.01***	0.0001652			0.000
Higher	-0.011***	0.0002677	0.000			-0.017***	0.0004186			0.000
Maried	-0.006***	0.0001403	0.000			-0.008***	0.0001377			0.000
Ln household size	0.005***	0.0001863	0.000			0.006***	0.0001829			0.000
Constant	0.974***	0.0002395	0.000			0.98***	0.0001668			0.000

**** p<.01, ** p<.05, * p<.1 ; $R^{2\,aj}$ = R^2 ajusted*

Source: Author, based on data from CHS 4

The results in Table 10 validate the overall significance of the model and, by extension, the robustness of the results found. As for the job quality equation, the results in Table 11 show

that the use of social capital negatively affects job quality for urban workers, but that this effect is negative and statistically significant at the 1% level for rural workers, all other things being equal. This can be explained by the fact that rural areas are often dominated by specific economic sectors, such as subsistence farming, livestock breeding or artisanal mining. These sectors can be characterized by precarious working conditions, unstable incomes and a lack of social protection. Moreover, economic diversification is often limited in these regions, further reducing opportunities for quality employment.

Furthermore, compared to rural youth, being a young urban worker improves job quality by 41%. This can be explained by the fact that urban environments generally offer greater economic diversity than rural areas. Cities are home to a wide range of industries, businesses and economic sectors, creating more job opportunities for young workers. Urban youth have access to a wider variety of sectors, including those offering higher-quality jobs, such as professional services, information technology, financial services and so on. As far as the social capital equation is concerned, the results confirm the negative and statistically significant effect of gender, education level and marital status, irrespective of the worker's place of residence found in Table 8. These results testify to the stability and robustness of the results obtained in Table 8.

Table 11: Effect of social capital on job quality according to informality

	Formel					Informel				
Equation	**Obs**	**Pams**	**R^{2aj}**	**F**	**P**	**Obs**	**Pams**	**R^{2aj}**	**F**	**P**
Job quality	2,169	15	0.36	19.16	0.00	15,866	15	0.45	183.4	0.00
Social capital	2,169	6	0.39	103.86	0.00	15,866	6	0.43	1663.3	0.00
Variables	**Coef.**		**St. Err.**	**p-value**		**Coef.**		**St. Err.**	**p-value**	
Job quality equation										
Social capital	-3.393**		17.13	0.045		-1.694***		2.524	0.008	
Ln household size	0.049*		0.03	0.099		0.013***		0.005	0.001	
Man	0.013		0.026	0.629		0.046***		0.006	0.000	
Primary	0.018		0.044	0.69		-0.065***		0.011	0.000	
Secondary	-0.13		0.094	0.165		-0.107***		0.022	0.000	
Higher	-0.186*		0.107	0.08		-0.135***		0.027	0.000	
Managers	0.072		0.061	0.238		0.032***		0.009	0.000	
Skilled	0.071		0.056	0.204		0.173***		0.008	0.000	
Industrial sector	-0.011		0.027	0.695		0.018***		0.006	.003	
Commercial sector	-0.042		0.036	0.237		0.038***		0.007	0.000	
Service sector	-0.097***		0.023	0.000		0.045***		0.007	0.000	
Single	0.091*		0.055	0.094		0.002		0.012	0.899	
Young	0.001		0.026	0.983		0.04**		0.017	0.021	
Seniors	-0.034		0.036	0.344		0.024		0.022	0.267	
Urban	0.025**		0.012	0.034		0.008		0.006	0.175	
Constant	33.71**		16.503	0.041		6.851***		2.468	0.006	
Equation of social capital										

Averagesocial capital per household	0.007***	0.0031636	0.017	0.069***	0.01519	0.000
Density population	0.004***	0.0004079	0.000	0.008***	0.00019	0.000
Man	-0.002***	0.0002273	0.000	-0.002***	0.00009	0.000
Primary	-0.002**	0.0006961	0.026	-0.004***	0.00012	0.000
Secondary	-0.006***	0.0006517	0.000	-0.01***	0.00013	0.000
Higher	-0.007***	0.0006579	0.000	-0.014***	0.00028	0.000
Single	-0.004***	0.000241	0.000	-0.007***	0.00010	0.000
Ln Household size	-0.003***	0.0003534	0.000	-0.005***	0.00015	0.000
Constant	0.967***	0.0006774	0.000	0.979***	0.00014	0.000
*** $p<.01$, ** $p<.05$, * $p<.1$; $R^{2\,aj} = R^2$ *ajusted*						

Source: Author, based on data from CHS 4

Table 11 shows the differentiated effect of the use of social capital on the job quality of employed workers according to informality. The R^2 values and Fischer test probabilities of the two equations validate the overall significance of the model. It emerges that the effect of social capital on job quality is negative and statistically significant at the 5% threshold in the formal sector and at the 1% threshold in the informal sector. It should be noted, however, that this perverse effect of social capital is more pronounced in the formal sector than in the informal sector. This result can be explained by the heterogeneous characteristics of the two sectors. Indeed, organizational structures in the formal sector can be more rigid and hierarchical, limiting social mobility and opportunities for advancement for those not connected to influential social capital. This can lead to a concentration of power and economic advantage in the hands of the few, to the detriment of job quality for the majority of workers. Thus, the differences between the formal and informal sectors, particularly in terms of regulation, structure and social norms, can explain the perverse effect of the use of social capital on the quality of employment of the employed, with a tendency towards a more pronounced perverse effect in the formal sector in Cameroon.

4.4 Policy implications of finding

Our results generally show that social capital negatively affects the quality of employment in Cameroon. These results highlight the importance of rethinking certain economic and social policies to improve the situation of workers. First, these results indicate that social capital (social networks, interpersonal ties, etc.), often considered a factor of solidarity and support, can sometimes function as an exclusive mechanism that reinforces structural inequalities and hinders access to quality employment opportunities. Consequently, it is essential that economic policies target a reduction in the negative effects of this form of insertion channels, by emphasizing programs that promote inclusion and equal opportunities in the labor market. Furthermore, the authorities could consider implementing mechanisms that

diversify and democratize recruitment processes, while encouraging transparency and professional mobility. Furthermore, the implementation of public policies aimed at strengthening vocational training and promoting technical skills could help offset the disadvantages created by limited social capital. Finally, it would be pertinent to strengthen the structures regulating the labor market to ensure better working conditions and protect employees from potential abuses. This could include the revision of labor laws, better enforcement of labor standards, and the expansion of social protection networks.

Moreover, social capital has a negative impact on the quality of employment, particularly for rural workers, which underscores the need for the government to adapt economic policies to urban and rural specificities. Indeed, policies should aim to strengthen inclusivity by targeting rural areas through training programs and skill diversification. At the same time, it is crucial to encourage transparency in recruitment practices and reduce the impact of informal social networks on access to quality jobs, to ensure equal opportunities for all workers.

Furthermore, our results indicate that social capital negatively affects job quality, particularly in the formal sector, with a more pronounced effect than in the informal sector. This suggests that, in the formal sector, recruitment practices based on social capital can limit access to quality jobs for those who do not rely on social capital. Thus, this result implies that the government should implement economic policies that promote transparency and objectivity in recruitment processes, strengthen opportunities for integration into the formal sector, and encourage the diversification of skills, particularly for workers marginalized within these networks or those who do not rely on social capital.

5. Conclusion

This study examines the effects of the use of social capital on job quality in the Cameroon labor market. To this end, the paper presents the theoretical and empirical debate on the relationship between social capital and job quality. Job quality is apprehended along five dimensions, namely income, job satisfaction, job security, job regularity and working time. social capital is also apprehended according to the multidimensional approach, taking into account its three dimensions: structural, relational and cognitive. This study contributes to the literature by adopting a multidimensional approach to job quality and examining the role of social capital in a developing country context where formal labor market structures are weak. The empirical examination of the relationship is based on data from the fourth Cameroon household survey conducted by the National Institute of Statistics (NIS) in 2014. Job quality is

apprehended according to the multidimensional approach via the construction of an index from the Multiple Correspondence Approach (MCA) on four dimensions, namely remuneration, job security, working time and job satisfaction. We mobilize the double least squares (2lsq) model, to address the issue of endogeneity bias associated with social capital. The triple least squares (3lsq) model is used to analyze robustness. The empirical results show that the use of social capital significantly reduces job quality by 8.46%. The same applies when we change the estimation model Taking into account heterogeneity related to area of residence and informality, our results remain robust. Our results generally suggest the need for policies that strengthen formal employment channels and reduce reliance on informal job search methods, which could negatively impact job quality. Future studies could explore additional factors influencing job quality, such as digital labor platforms and skill mismatches, to provide a more comprehensive understanding of labor market dynamics in Cameroon.

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