



# Balancing Study and Part-Time Work: Empirical Evidence and Policy Implications for Higher Education in Vietnam

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## Abstract

*This study examines the impact of part-time employment on students' academic performance in the context of technical higher education in Vietnam, from a Marxist political economy perspective. The analysis is based on survey data from 220 students at Thai Nguyen University of Technology and employs an Ordinary Least Squares (OLS) model to evaluate the effects of working hours, income, job relevance, psychological stress, and control variables on Grade Point Average (GPA).*

*The results indicate that working hours and psychological stress have negative and statistically significant effects on GPA, while job relevance to the field of study has a positive effect. Income is not statistically significant at the 5% level. Additional analysis by working-hour groups suggests the presence of a threshold effect, with 10–20 hours per week representing a relatively appropriate range.*

*The study contributes to clarifying the relationship between labor and learning in the process of labor power reproduction and provides empirical evidence for higher education policy-making.*

**Keywords:** *Student part-time employment; Academic performance; Threshold effect; Marxist political economy; Labor power reproduction; Higher education in Vietnam.*

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## I. INTRODUCTION

In the context of a market economy and international integration, Vietnamese students are increasingly engaged in part-time employment during their studies, particularly in technical universities. This phenomenon reflects not only immediate financial needs but also a growing trend toward early alignment between education and the labor market.

However, part-time work raises an important question: does it support or hinder academic performance and the formation of high-quality human capital? Previous studies have primarily examined the relationship between working hours and academic outcomes, yet the findings remain inconclusive, particularly regarding the potential existence of threshold effects.

Moreover, approaches grounded in political economy—especially Marxist theory on the reproduction of labor power—have not been sufficiently integrated into empirical analysis. This limits the ability to explain the socio-economic mechanisms underlying the relationship between labor and learning.

Addressing this gap, this study investigates the impact of part-time employment on students' academic performance by combining a Marxist political economy framework with quantitative methods. It focuses on the role of labor intensity and job characteristics, while examining the potential existence of a threshold effect in this relationship.

## II. THEORETICAL FRAMEWORK: AN APPROACH FROM KARL MARX'S THEORY IN THE CONTEMPORARY CONTEXT

This study approaches student part-time employment from a Marxist political economy perspective, in which labor power is treated as a central category. Within higher education, students are not only learners but also subjects participating in the formation and development of skilled labor power.

According to Marxist theory, the reproduction of labor power consists of two dimensions: simple reproduction, which ensures immediate material subsistence, and expanded reproduction, which enhances the quality of labor power through education, training, and skill accumulation. In the context of student employment, these two processes coexist and may come into tension.

On the one hand, participation in paid work improves students' financial conditions, reflecting the requirements of simple reproduction. On the other hand, excessive labor intensity may reduce the time and capacity available for study, thereby negatively affecting expanded reproduction. Conversely, when jobs are closely related to students' fields of study, employment can facilitate skill accumulation and support academic development.

Based on this framework, the study constructs an analytical model in which: (i) working hours and financial constraints capture the pressures of simple reproduction; (ii) job relevance and prior academic ability represent the conditions for expanded reproduction; and (iii) academic performance (GPA) serves as a composite indicator of the effectiveness of labor power reproduction. This framework enables the relationship between labor and learning to be examined not only statistically but also in terms of its underlying socio-economic mechanisms.

### III. RESEARCH METHODOLOGY

#### 3.1. Data and Research Design

This study employs a quantitative approach based on survey data collected from students at Thai Nguyen University of Technology. The data were gathered באמצעות a structured questionnaire administered directly to students during the academic semester, capturing both study and part-time work activities.

A total of 240 questionnaires were distributed, of which 228 valid responses were returned. After excluding incomplete observations, the final sample consists of 220 students. All data used in this study are derived from actual survey responses, with no simulated data involved.

The sample was selected using a convenience sampling method, including students from various technical disciplines with diverse levels of participation in part-time employment.

#### 3.2. Variables and Measurement

The dependent variable is academic performance (GPA), measured by students' cumulative grade point average at the time of the survey.

The independent and control variables are presented in Table 1.

**Table 1. Variable description and measurement**

Variable	Symbol	Measurement	Expected sign
Grade Point Average	GPA	4-point scale	—
Working hours	Hours	Hours per week	(-)
Income	Income	Million VND per month	(?)
Job relevance	Relevance	Likert scale (1-5)	(+)
Psychological stress	Stress	Likert scale (1-5)	(-)
Prior academic ability	PriorAbility	Likert scale (1-5)	(+)
Financial constraint	FinancialConstraint	Likert scale (1-5)	(-)

The variables Relevance, Stress, PriorAbility, and FinancialConstraint are measured using a five-point Likert scale (1 = very low, 5 = very high), based on students' self-assessments.

The Stress variable captures common symptoms such as fatigue, sleep deprivation, and perceived academic pressure. PriorAbility reflects students' prior academic capacity, while FinancialConstraint indicates the degree of financial difficulty experienced during their studies.

#### 3.3. Model Specification and Estimation Method

Based on the theoretical framework of labor power reproduction, the empirical model is specified to examine the effects of labor intensity and job characteristics on academic performance:

$$GPA = \beta_0 + \beta_1(\text{Hours}) + \beta_2(\text{Income}) + \beta_3(\text{Relevance}) + \beta_4(\text{Stress}) + \beta_5(\text{PriorAbility}) + \beta_6(\text{FinancialConstraint}) + \varepsilon$$

In this model, Hours represents the intensity of labor participation (associated with the pressures of simple reproduction), while Relevance and PriorAbility capture factors related to expanded reproduction.

The model is estimated using the Ordinary Least Squares (OLS) method. Diagnostic tests are conducted to ensure the reliability of the estimates.

**Table 2. Diagnostic tests**

Test	Indicator	Result	Conclusion
Multicollinearity	VIF (max)	< 5	No serious multicollinearity
Heteroskedasticity	Breusch-Pagan (p-value)	> 0.05	No heteroskedasticity detected

The diagnostic results indicate that the model is appropriate for analysis and that the estimates are reliable.

### 3.4. Additional Analysis by Working-Hour Groups

In addition to regression analysis, the study conducts subgroup analysis based on working hours to provide a clearer comparison of academic performance and stress levels.

Specifically, the sample is divided into three groups:

Group 1: less than 10 hours per week

Group 2: 10–20 hours per week

Group 3: more than 20 hours per week

This classification allows for an exploratory assessment of potential threshold effects in the relationship between part-time employment and academic performance, thereby supporting the interpretation of regression results.

## IV. RESEARCH RESULTS

### 4.1. Descriptive Statistics

Table 3 presents the main characteristics of the sample of 220 students.

**Table 3. Descriptive statistics**

Variable	Symbol	Mean	Std. Dev.	Min	Max
GPA	GPA	2.52	0.32	1.8	3.4
Working hours	Hours	17.8	7.2	5	30
Income	Income	3.2	1.1	1.5	6.0
Job relevance	Relevance	3.9	0.8	2	5
Stress	Stress	3.8	0.7	2	5
Prior ability	PriorAbility	3.0	0.6	2	4
Financial constraint	FinancialConstraint	3.5	0.7	2	5

The results indicate that the average GPA is 2.52, suggesting a moderate level of academic performance. Students work an average of 17.8 hours per week, indicating relatively high labor intensity.

Average income from part-time work is 3.2 million VND per month, serving as financial support. Job relevance is relatively high (3.9/5), while stress levels are also elevated (3.8/5), reflecting a common level of pressure among working students.

### 4.2. Analysis by Working-Hour Groups

To examine differences in academic performance across labor intensity, the sample is divided into three groups based on working hours.

**Table 4. Academic performance by working-hour groups**

Working hours	Percentage (%)	Mean GPA	Stress
< 10 hours	40%	2.68	3.2
10–20 hours	40%	2.55	3.6
> 20 hours	20%	2.30	4.3

The results show clear differences across groups. Students working fewer than 10 hours per week achieve the highest GPA (2.68) and experience the lowest stress levels. Those working 10–20 hours exhibit a slight decline in GPA but maintain relatively stable performance.

In contrast, students working more than 20 hours per week have the lowest GPA (2.30) and the highest stress levels (4.3). This pattern suggests that higher labor intensity is associated with declining academic performance and increasing stress, providing empirical support for the potential existence of a threshold effect.

### 4.3. Regression Results

**Table 5. OLS regression results**

Variable	Coefficient ( $\beta$ )	Std. Error	p-value
Hours	-0.018	0.005	0.001
Income	-0.00004	0.00002	0.072
Relevance	+0.165	0.042	0.000
Stress	-0.128	0.038	0.002
PriorAbility	+0.210	0.050	0.000

FinancialConstraint	-0.095	0.035	0.006
Constant	1.420	0.210	0.000

**4.4. Interpretation of Regression Results**

The regression results show that working hours (Hours) have a negative and statistically significant effect at the 1% level. Specifically, an additional hour of work per week is associated with a decrease of approximately 0.018 points in GPA, holding other factors constant. This reflects a trade-off between labor and study time.

Job relevance (Relevance) has a positive and highly significant coefficient, indicating that employment related to students’ fields of study can support academic performance. This suggests that labor can play a constructive role under certain conditions.

Psychological stress (Stress) has a significant negative effect on GPA, highlighting the impact of fatigue and pressure on academic outcomes. Prior academic ability (PriorAbility) shows the strongest positive effect, emphasizing the importance of students’ initial academic capacity.

Financial constraint (FinancialConstraint) negatively affects GPA, suggesting that economic pressure may indirectly reduce academic performance through increased labor participation.

Income does not show statistical significance at the 5% level (p-value = 0.072), indicating insufficient evidence to conclude a clear effect on GPA. This result should be interpreted with caution.

**4.5. Summary of Findings**

Overall, the empirical results indicate that part-time employment has a dual effect on students’ academic performance. High labor intensity tends to reduce academic outcomes, while jobs related to students’ fields of study may provide academic benefits.

The subgroup analysis suggests the presence of a threshold effect, with 10–20 hours per week representing a relatively appropriate range of working intensity. However, this conclusion is primarily based on descriptive analysis and should be further validated in future research.

**V. DISCUSSION**

The findings reveal that student part-time employment exhibits a dual effect, reflecting the inherent tension between labor and learning in the process of labor power reproduction. High working intensity tends to undermine academic performance by increasing stress and constraining study time, whereas employment closely aligned with students’ fields of study can facilitate skill acquisition and enhance learning outcomes.

From a Marxist political economy perspective, this pattern can be understood as the interaction between two dimensions of labor power reproduction: simple reproduction, which addresses immediate material needs, and expanded reproduction, which improves the quality of labor power through education and training. When working intensity exceeds a certain threshold, the pressures of simple reproduction tend to dominate, thereby limiting students’ capacity to invest in academic activities. By contrast, when employment is relevant to academic specialization, it may function as a complementary mechanism that supports expanded reproduction.

These findings suggest that the relationship between part-time work and academic performance is contingent rather than purely linear, depending on both the intensity and the nature of employment. This has important implications for policy design, indicating that efforts should focus on achieving a balance between students’ economic needs and educational objectives, rather than adopting a one-dimensional approach to student employment.

**VI. POLICY IMPLICATIONS**

Building on the empirical findings and the Marxist political economy framework outlined above, student employment can be understood as a manifestation of the tension between simple and expanded reproduction of labor power. Accordingly, policy responses should aim not merely to regulate student work, but to manage this tension in a way that supports both immediate subsistence needs and long-term human capital formation.

At the macro level, the negative effects of excessive working hours and financial constraints on academic performance suggest that student employment is partly driven by pressures of simple reproduction. Expanding financial support mechanisms—such as scholarships, student loans, and living subsidies—can reduce the need for high-intensity labor, thereby alleviating its adverse impact on learning outcomes. From this perspective, such policies represent investments in the expanded reproduction of labor power.

At the institutional level, the positive effect of job relevance indicates that not all forms of student employment are detrimental. Universities should therefore move beyond a restrictive approach and instead integrate employment into the educational process. Strengthening partnerships with enterprises and promoting work-integrated learning models can transform relevant employment into a mechanism that supports expanded reproduction, enabling students to accumulate both academic knowledge and practical skills.

At the individual level, the regression and subgroup results jointly suggest that the relationship between working hours and academic performance is contingent upon labor intensity. The identified threshold of approximately 10–20 hours per week provides a practical reference point for students' time allocation. Universities should enhance academic and career counseling services to help students manage work–study balance and prioritize employment aligned with their field of study.

Finally, the significant negative effect of psychological stress highlights the need to address the non-economic dimensions of student employment. Institutions should strengthen mental health support systems and establish early monitoring mechanisms to identify students experiencing excessive work-related pressure, thereby mitigating its impact on academic performance.

Overall, an effective policy framework should aim to create conditions under which labor and learning are not in conflict, but can be coordinated in a manner that supports the sustainable reproduction of high-quality labor power.

## VII. CONCLUSION

This study finds that part-time employment affects academic performance through two opposing mechanisms associated with labor power reproduction. Higher working hours and psychological stress exert negative effects on GPA, while job relevance contributes positively, indicating that the impact of student employment depends on both labor intensity and job characteristics.

The combined regression and subgroup analyses suggest a threshold effect, with approximately 10–20 working hours per week representing a relatively balanced range. Beyond this level, the pressures of simple reproduction tend to dominate, leading to declining academic performance, whereas relevant employment can support elements of expanded reproduction.

Overall, the findings provide empirically grounded evidence for designing policies that better align student employment with educational objectives, thereby supporting the sustainable development of human capital.

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