

ECO2114A
First mid-term evaluation

Professor David Gray

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You may not consult with any written documents whatsoever, and no conversation is permitted while the examination is in progress. It is forbidden to look at other students' papers. There are 25 multiple choice questions and 25 points worth of short answer questions. For the multiple choice questions, it may not necessarily be the case that four of the responses are totally wrong, and one of them is unambiguously correct. In such situations, select the best answer. Respond to the multiple choice questions on the scantron sheet. Please grid in your name and your student number by filling in the appropriate ovals in each column. You must grid in the ovals below each digit of your student number, and below each letter of your name. Good luck!

Part A: Multiple choice questions (25 points)

1. What is the most salient (noticeable) feature of the alternative perspectives (other than the neo-classical paradigm) of the labour market?
 - a) They reject the neo-classical tenet that economic agents make rational choices based on their own free will.
 - b) It is believed that market forces are the primary determinants of labour market outcomes, but these outcomes are often unjust
 - c) They all hold that analysis should be based on descriptive realism rather than on mathematical tools and graphical analysis
 - d) The belief that only the firms are motivated by greed.

A

2. Which of the following statements regarding the neo-classical paradigm is false?

- a) Labour market imperfections, such as the existence of uncertainty and imperfect information, render neo-classical labour market theory invalid.
- b) The primary quantity-type variable is the level of employment, while the primary price-type variable is the wage rate.
- c) While one can apply supply and demand analysis to labour markets, labour markets have attributes that distinguish them in notable fashion from other types of markets.
- d) It is believed that no individual worker or firm acting on its own can influence the market equilibrium.

A

3. For a worker who is deciding how many hours of labour to supply, all of the following are true except:

- a) The marginal rate of substitution between income and leisure is equal to the wage rate.
- b) The rate at which she is willing to exchange leisure for income equals the rate at which the market allows her to do it.
- c) The income effect of a wage change equals the substitution effect.
- d) The worker cannot increase total utility by working more or fewer hours given the wage rate and the non-labour income.

C

4. Which of the following groups of workers is considered to be part of the labour force?

- a) Full-time students
- b) The unemployed
- c) Discouraged workers
- d) Members of the Canadian military

B

5. Which of the following countries tends to have the lowest labour force participation rates?

- a) countries in continental Europe such as France and Italy
- b) Canada
- c) English-speaking countries such as the United States, Canada, the United Kingdom, and Australia
- d) There is no enduring ranking, as in some years one country will have higher rates, but in other years another country's rates will surpass them

A

6. The equation for the unemployment rate (UR) is:

- a) $UR = (\# \text{ employed minus } \# \text{ unemployed}) / \# \text{ unemployed}$
- b) $UR = (\# \text{ employed minus } \# \text{ unemployed}) / \# \text{ labour force}$
- c) $UR = \# \text{ unemployed} / \# \text{ labour force}$
- d) $UR = \# \text{ unemployed} / \# \text{ employed}$

C

7. The current value for the official rate of unemployment in Canada is:

- a) 5.4 %
- b) 6.1 %
- c) 6.7 %
- d) 7.5 %



C

8. The approximate value for the labour-force participation rate in Canada is:

- a) 70 %
- b) 76 %
- c) 57 %
- d) 66 %

D

9. According to the professor of this course, the best gauge of the state of the labour market is:

- a) the employment to working-age-population ratio
- b) the unemployment rate
- c) the labour force participation rate
- d) the average wage rate

A

10. The working-age population is divided into which of the following components?

- a) those in the labour force versus those who are unemployed
- b) those in the labour force versus those who are inactive
- c) those in the labour force versus those who are employed
- d) those who are employed versus those who are not in the labour force

B

11. Which of the following statements about the history of trends in the labour force participation rate is true?

- a) Since the end of World War Two, it has trended up for men but down for women
- b) Since the end of World War Two, it has not exhibited a trend for men, but has trended upward in the case of women
- c) Since the end of World War Two, it has not exhibited a trend for women, but has trended upward in the case of men
- d) Since the end of World War Two, it has trended up for women but down for men

D

12. What are the three primary economic outcomes that are the focus of labour economics?

- a) wages, employment levels, and unemployment levels
- b) prices, profits, and output levels
- c) land, labour, and capital
- d) institutionalism, dualism, and radicalism

A

13. The reservation wage is defined as:

- a) The wage at the vertex, or the kink, in the backward-bending supply curve
- b) the utility-maximizing wage of the worker
- c) the highest wage the employer is willing to pay in order to hire and employ and labour
- d) the lowest wage at which the worker will supply a positive number of hours worked

D

14. Which of the following statements concerning the market-clearing wage is false?

- a) It is the equilibrium wage level
- b) It is often considered to be equitable
- c) It is the wage level at which the quantity demanded of labour equals the quantity supplied of labour
- d) It serves as a useful benchmark for evaluating wage outcomes

B

15. In the view of the professor (David Gray), the most fundamental labour market policy challenge currently facing Canada's government is:

- a) strengthening the role and power of labour unions
- b) ensuring that workers' wages are protected from erosion by inflation
- c) ensuring that Canada's workforce has the training, education, and skills to adjust to a rapidly evolving, fluid labour market.
- d) ensuring that jobs are distributed equitably across the regions of Canada

C

16. All of the following are elements of the scientific approach to investigating questions pertaining to labour economics except:

- a) appealing to a conceptual model of how the labour market works
- b) empirical validation of hypotheses
- c) stating refutable hypotheses
- d) appealing to anecdotes in order to support assertions

D

17. Business interests and 'conservatives' strongly dislike the minimum wage, claiming that:

- a) as wages are increased, all other factors held constant, the level of employment falls
- b) it severely harms profitability
- c) low-wage workers do not deserve a raise
- d) they lead to high price inflation

A

18. Labour unions and social activist groups strongly support the minimum wage, claiming all of the following EXCEPT that:

- a) the socially just society demands it
- b) if supply and demand forces are allowed to work, the equilibrium wage for low-wage workers will increase
- c) low-wage workers deserve a raise
- d) as wages are increased, workers increase their spending, which will stimulate the macroeconomy

B

19. Which of the following is not an ingredient of the model of labour supply?

- a) the worker's preferences for income versus leisure
- b) the wage elasticity of supply
- c) the worker's budget constraint
- d) the assumption that workers are both rational and greedy

B

20. Proponents of the minimum wage tend to argue all of the following except:

- a) there might exist a minor dis-employment effect after the minimum wage is raised
- b) it is socially unjust to employ someone at low wages
- c) it is an effective instrument for combating poverty
- d) it can have the effect of raising the pay of all low wage workers

A

21. Which of the following statements regarding the labour market in the context of the circular flow model is true?

- a) It is part of the output market.
- b) It is one of the three factor, or input, markets.
- c) Only firms act in the labour market.
- d) It has no interaction with the money market.

B

22. Which of the following expressions is the correct formula for the wage elasticity of supply?

- a) The % change in the quantity supplied of labour divided by the % change in the wage
- b) The % change in the wage divided by the % change in the quantity supplied of labour
- c) The change in the quantity supplied of labour divided by the change in the wage
- d) The change in the wage divided by the change in the quantity supplied of labour

A

23. The phenomenon of moonlighting is one illustration of the labour supply model. What is its interpretation?

- a) The income effect dominates the substitution effect.
- b) The substitution effect dominates the income effect.
- c) The wage elasticity of supply is inelastic.
- d) The supply of labour curve is backward bending

A

24. The phenomenon of working overtime hours is one illustration of the labour supply model. What is its interpretation?

- a) The income effect dominates the substitution effect.
- b) The substitution effect dominates the income effect.
- c) The wage elasticity of supply is inelastic.
- d) The supply of labour curve is backward bending

B

25. The labour force is equal to:

- a) The working-age-population minus the unemployed population
- b) The entire population minus the working-age-population
- c) The unemployed population plus the employed population
- d) The unemployed population divided by the employed population

C



II Short Answer Questions (25 points)

Answer all of the questions below in complete sentences. Point form is not acceptable.

1. Consider the situation of a worker who is participating in the labour market, and is thus at his/her intensive margin. Suppose that at the current number of hours that are being worked, the marginal rate of substitution of leisure for income is less than the going market wage. This is a disequilibrium situation. Explain step by step how this worker will reach his/her labour supply choice, which will be an interior solution. I hinted to you that this question might appear on the examination, and here it is. (6 points)

WE ARE TOLD THAT THE $MRS < WAGE$, AND THAT THE WORKER IS WORKING A POSITIVE NUMBER OF HOURS. THIS MEANS THAT HE/SHE CANNOT BE IN EQUILIBRIUM, AND THAT WE EXPECT AN ADJUSTMENT TO OCCUR. REMEMBER THAT THE WORKER CANNOT CONTROL THE WAGE (ALTHOUGH ALL WORKERS WOULD LOVE TO HAVE THAT POWER). THE ONLY CHANGE THAT THE WORKER CAN MAKE IS THE NUMBER OF HOURS THAT HE/SHE CHOOSES TO WORK. SINCE THE WAGE IS GREATER THAN THE MRS , IT MEANS THAT THE WAGE RATE IS GREATER THAN THE WORKER'S VALUATION OF LEISURE (HE/SHE VALUES THE HOUR'S WORTH OF INCOME MORE THAN THE HOUR OF LEISURE GIVEN THE PRICE OF LEISURE), SO HE/SHE WILL WORK LONGER HOURS. RECALL THAT $MRS = (MU \text{ OF LEISURE} / MU \text{ OF INCOME})$. AS THE NUMBER OF HOURS WORKED RISES (AND LEISURE GOES DOWN), THE NUMERATOR INCREASES DUE TO THE LAW OF DIMINISHING MARGINAL UTILITY (GOING BACKWARDS) FOR LEISURE, WHILE THE DENOMINATOR DECREASES DUE TO THE LAW OF DIMINISHING MARGINAL UTILITY FOR INCOME. THE RATIO WILL RISE, AND EQUALITY WILL BE RESTORED, THUS GIVING US EQUILIBRIUM.

2. Explain the major differences between the dominant neo-classical paradigm of the labour market and the institutionalist approach to analyzing the labour market. In other words, what are the salient features that set them apart? What is the significance of the existence of different paradigms? In other words, why did I spend time in class presenting them? (6 points)

ACCORDING TO THE FORMER, DOMINANT PARADIGM, ALMOST ALL LABOUR MARKET PLAYERS, BE THEY WORKERS ON THE SUPPLY SIDE OR FIRMS ON THE DEMAND SIDE, MAKE ECONOMIC CHOICES BASED ON THEIR OWN FREE WILL. SOME ARE WELL-ENDOWED, WHILE OTHERS ARE NOT, BUT THEY ARE NOT COERCED WHEN THEY MAKE THEIR CHOICES. THEY ARE ALL GREEDY AND SEEK TO OPTIMIZE (EITHER UTILITY FUNCTIONS OR

PROFIT FUNCTIONS), BUT OF COURSE THEY ALL FACE CONSTRAINTS DUE TO SCARCITY. BOTH SIDES OF THE MARKET HAVE A VERY ATOMISTIC STRUCTURE, WHICH MEANS THAT NEITHER A GROUP OF WORKERS NOR A GROUP OF FIRMS CAN INFLUENCE THE MARKET OUTCOMES. THE FIX IS NOT IN. THE UNDERLYING IDEOLOGY IS THAT MARKET FORCES GENERALLY LEAD TO HIGHER LEVELS OF WELL-BEING. THE METHODOLOGY CONSISTS OF ANALYTICAL MODELS SUCH AS SUPPLY AND DEMAND THAT ARE THOUGHT TO BE APPLICABLE TO MANY BUT NOT ALL SITUATIONS. IT IS NOT QUITE LIKE 'ONCE SIZE FITS ALL', BUT THERE IS AN OVERARCHING CONCEPTUAL FRAMEWORK THAT IS THOUGHT TO BE ABLE TO EXPLAIN MANY OF THE LABOUR MARKET OUTCOMES THAT WE OBSERVE.

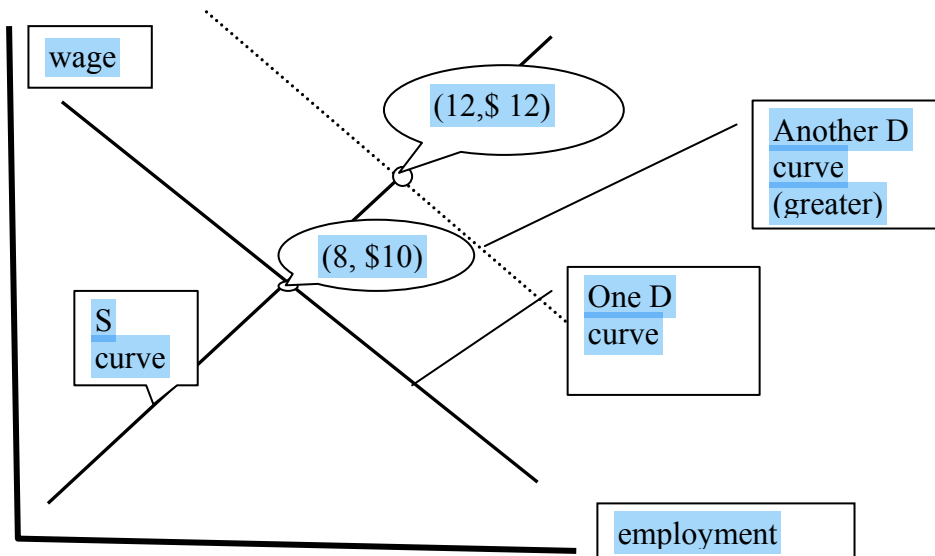
ACCORDING TO THE LATTER PARADIGM, LABOUR MARKET OUTCOMES ARE DETERMINED BY A FINITE SET OF ENTITIES, SUCH AS LABOUR UNIONS, LARGE CORPORATIONS, AND GOVERNMENTS – NOT BY INDIVIDUAL WORKERS AND FIRMS. ALMOST ANY INDIVIDUAL PLAYER IS COERCED. THESE OUTCOMES ARE SHAPED BY SOCIAL MORES, CUSTOMS, CONVENTIONS AND INSTITUTIONS, AS OPPOSED TO SUPPLY AND DEMAND FORCES. THE FORCES OF HISTORY, BOTH SOCIOLOGICAL AND POLITICAL IN NATURE, ARE THOUGHT TO BE MORE IMPORTANT THAN THE FORCES OF SUPPLY AND DEMAND. THE UNDERLYING IDEOLOGY IS THAT MARKET FORCES DO NOT GENERALLY LEAD TO HIGHER LEVELS OF WELL-BEING. THE METHODOLOGY CONSISTS OF DESCRIPTIVE REALISM, WHICH MEANS THAT ALMOST EVERY SINGLE CASE MERITS ITS OWN DETAILED STUDY WHOSE FINDINGS CANNOT BE APPLIED TO MANY OTHER SITUATIONS. ONE SIZE DOES NOT FIT ALL – ONE SIZE IS SPECIFIC TO ONLY ONE FIRM, ONE OCCUPATION, ONE NARROW LABOUR MARKET, ETC.

THE SIGNIFICANCE IS THAT TWO RESEARCHERS CAN ANALYSE THE EXACT SAME LABOUR MARKET OUTCOME USING THE SAME INFORMATION AND DATA, AND ARRIVE AT RADICALLY DIFFERENT CONCLUSIONS DEPENDING ON THE PARADIGM IN WHICH THEY CONDUCT THEIR ANALYSIS. THE UNDERLYING VALUES AND IDEOLOGY ARE PART OF THE ANALYTICAL APPROACH.

You did not have to write all of these points in order to receive full credit.

3. Consider two equilibrium points in a labour market. At the first point, the employment level is 8 million hours worked per week, and the wage is \$ 10 per hour. At the second point, the employment level is 12 million hours worked per week, and the wage is \$ 12 per hour. (7 points)

- a) Depict these two equilibrium points in a supply and demand graph. Label your axes and curves. (This should be easy.)



THIS GRAPH IS NOT DRAWN TO SCALE. IF YOU DREW TWO D CURVES AND TWO SUPPLY CURVES, YOU RECEIVED CREDIT FOR PART A. IN ORDER TO CALCULATE AN ELASTICITY, AND IN ORDER TO INTERPRET IT, IT HAS TO BE ALONG THE SAME SUPPLY CURVE.

- b) Calculate the wage elasticity of labour supply between these two points (based on an average wage of \$ 11 and an average quantity of 10). Show your work.

$$\text{WES} = \% \text{ change in employment} / \% \text{ change in wage} = [(+ 4 / 10) / (+ 2 / 11)] = (40 \% / 18.2 \%) = 2.2$$

- c) Give the exact interpretation of that value in words (and not in mathematical symbols).

A 1 % INCREASE (DECREASE) IN THE WAGE CORRESPONDS TO A 2.2 % INCREASE (DECREASE) IN THE QUANTITY SUPPLIED OF LABOUR.

- d) Is this value elastic, inelastic, or unity elastic? Explain why.
IT IS HIGHLY ELASTIC AS THIS VALUE FAR EXCEEDS UNITY.

- e) Are these workers very responsive, somewhat responsive, or not responsive to wages changes? Explain why.

THEY ARE QUITE RESPONSIVE TO CHANGES IN THE WAGE, AS THAT IS THE ESSENCE OF ELASTIC WES.

4. (6 points)

- a) Identify and give the significance of the discouraged worker effect.

DISCOURAGED WORKERS ARE JOBLESS WORKERS WHO ARE NOT CONSIDERED TO BE PART OF THE LABOUR FORCE. THIS IS BECAUSE THEY HAVE GIVEN UP SEARCHING FOR WORK UNDER THE BELIEF THAT NO

SUITABLE JOBS ARE AVAILABLE FOR THEM. THE SIGNIFICANCE IS TWOFOLD. FIRST, THEY ARE NOT CONSIDERED TO BE OFFICIALLY UNEMPLOYED. SECOND, IF THEY WERE COUNTED AS BEING UNEMPLOYED, THE OFFICIAL UNEMPLOYMENT RATE WOULD BE CONSIDERABLY HIGHER. WHEN THE LABOUR MARKET IS HEALTHY, THERE ARE NOT VERY MANY DISCOURAGED WORKERS.

b) Identify and give the significance of the added worker effect.

ADDED WORKERS ARE WORKERS AT THE MARGIN OF THE LABOUR FORCE WHO TEND NOT TO PARTICIPATE IN THE LABOUR MARKET WHEN THE LABOUR MARKET IS HEALTHY. WHEN LABOUR MARKET CONDITIONS ARE BAD, HOWEVER, THESE WORKERS ARE TEMPTED TO ENTER THE LABOUR MARKET IN SEARCH OF A JOB IF A FAMILY MEMBER IS LAID OFF, OR IF THE LABOUR MARKET INCOME OF THE FAMILY HAS FALLEN. THE SIGNIFICANCE IS TWO-FOLD. WHEN THE LABOUR MARKET IS HEALTHY, THERE ARE NOT VERY MANY ADDED WORKERS, AND ALL OTHER FACTORS HELD CONSTANT, THE LABOUR FORCE PARTICIPATION RATE FALLS. WHEN THE LABOUR MARKET IS NOT HEALTHY, THE LABOUR FORCE PARTICIPATION RATE RISES, ALL OTHER FACTORS HELD CONSTANT.