Diploma Programme subject in which this extended essay is registered: Economics

(For an extended essay in the area of languages, state the language and whether it is group 1 or group 2.)

Title of the extended essay: "To what extent is the supply of labour in Singapore's finance industry inelastic?"

Candidate's declaration

If this declaration is not signed by the candidate the extended essay will not be assessed.

The extended essay I am submitting is my own work (apart from guidance allowed by the International Baccalaureate).

I have acknowledged each use of the words, graphics or ideas of another person, whether written, oral or visual.

I am aware that the word limit for all extended essays is 4000 words and that examiners are not required to read beyond this limit.

This is the final version of my extended essay.

Candidate's signature: __ _________________________ Date: 03/02/09
Supervisor's report

The supervisor must complete the report below and then give the final version of the extended essay, with this cover attached, to the Diploma Programme coordinator. The supervisor must sign this report; otherwise the extended essay will not be assessed and may be returned to the school.

Name of supervisor (CAPITAL letters) __________________________________________

Comments

Please comment, as appropriate, on the candidate's performance, the context in which the candidate undertook the research for the extended essay, any difficulties encountered and how these were overcome (see page 13 of the extended essay guide). The concluding interview (viva voce) may provide useful information. These comments can help the examiner award a level for criterion K (holistic judgment). Do not comment on any adverse personal circumstances that may have affected the candidate. If the amount of time spent with the candidate was zero, you must explain this, in particular how it was then possible to authenticate the essay as the candidate's own work. You may attach an additional sheet if there is insufficient space here.

The candidate initially struggled with making the focus of the essay narrow enough to be able to get some meaningful data and also to collate and evaluate the information that would help him answer the question. After advice and discussions with the supervisor, however, the candidate proceeded with enthusiasm and determination, to produce an interesting essay looking at Supply of Labour in Singapore's finance industry; a topic which is beyond the scope of the IB Economics syllabus.

I have read the final version of the extended essay that will be submitted to the examiner.

To the best of my knowledge, the extended essay is the authentic work of the candidate.

I spent ______ hours with the candidate discussing the progress of the extended essay.

Supervisor's signature: __________________________________________ Date: _______________
IB Economics Extended Essay

“To what extent is the supply of labour in Singapore’s finance industry inelastic?”

Session: May 2009
Candidate Name:
Session Number:
IB Subject of Essay: Economics (HL)
Supervisor Name:
Word Count: 3,888
Abstract

[Research Question]

Living overseas due to my father’s job as an investment banker means that I live a life that is more affluent than it otherwise would have been if my father worked in Australia. I have always been interested in why higher salaries were earned in Singapore’s finance industry compared to Australia. The theory of labour supply has allowed me to understand some of the reasons for this – hence the research question, “To what extent is the supply of labour in Singapore’s finance industry inelastic?”

[Scope of Investigation]

To determine this, Standard Chartered Bank and 3 recruitment firms (Morgan McKinley, KS Consulting and …Profile Search and Selection) in Singapore were examined. I chose Standard Chartered as it is my father’s employer and because it is a leading bank in Singapore. A total of 10 randomly chosen representatives from this bank were asked to complete a comprehensive questionnaire. A second questionnaire with minor modifications was given to the 3 recruitment firms. Furthermore, 2 interviews were conducted with employees from Standard Chartered, and 1 interview conducted with Morgan Mickinley employee. To ascertain a relative view of the inelasticity of labour supply I also conducted an interview with a teacher and gave out 7 questionnaires to the Economics & Business department at the college. Why?

As secondary sources, the Economics Third Edition textbook was used for background information on the supply of labour and the Economics A-Z handbook was used for definitions. Several websites, located in the Bibliography, were also used to obtain data regarding the finance industry in Singapore.

[Summary of Conclusion]

From my research I found that Singapore’s finance industry has an inelastic labour supply, due to a low base of substitute labour, low occupational mobility and the need to pay for the relocation of foreign talent.

Abstract Word Count: 296

Does not explain it.

Economics Peng.
# Contents Page

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1.0 Introduction

Singapore, located in South East Asia, has experienced significant growth over the last few decades due in part to the economic growth\(^1\) of China and India, which in turn has increased economic activity in the region. As a result, the Singapore finance sector has become a booming industry with expansionary pressure constantly creating many key roles that require a capable and suitably qualified workforce to meet increasing demand\(^2\) for financial services.

The significance of undertaking this subject lies in exploring what motivates people to work in the Singapore finance industry and to gather an understanding of how the industry finds the right talent to fill positions. Therefore, I believe that this subject is worthy of investigation to discover how the industry uses incentives to attract labour\(^3\).

To achieve these goals I will be examining the theory of elasticity of labour supply. One of this theory's main principles is that the greater the inelasticity of supply the more difficult it is to expand a given workforce.

\[
\text{Elasticity of Labour supply} = \frac{\text{percentage change in labour supply}}{\text{percentage change in wage rate}}
\]

To answer my research question I will first identify what factors affect the elasticity of labour supply and then analyze the extent to which the data that I have obtained from questionnaires and interviews conforms to the factors that I have highlighted. Primary data will be collected from questionnaires that will be given to a sample of bankers and Singapore finance industry recruiters. A similar questionnaire will also be given to a sample of economics and business teachers to provide a contrast. Following this I will be holding selected interviews with individuals from these groups to focus on the largest factors affecting the elasticity of labour supply in the Singapore finance industry. This primary and secondary data, both qualitative and quantitative, will also allow me to show how skilled labour is attracted to the finance industry.

I am motivated, as someone considering a career in economics, to understand the motivating factors that attract workers to the growing finance industry in Singapore and thus my research question is:

**To what extent is the supply of labour in Singapore’s finance industry inelastic?**

---

\(^1\) An increase in output and real income, usually measured in gross domestic product (GDP).

\(^2\) Is the quantity of a good or service that people are both willing and able to buy.

\(^3\) The factor of production which involves people working to produce goods and services.

\(^4\) [http://books.google.com.sg/books/ geographical+mobility+inelastic+supply](http://books.google.com.sg/books/ geographical+mobility+inelastic+supply)
2.0 Discussion

[2.1] The theory of elasticity of labour supply – outline

The theory of elasticity of labour supply asserts that the greater the inelasticity of labour supply to changes in the price of labour the more difficult and expensive it is to expand labour supply to meet changes in demand. It is affected by the following 3 factors⁵:

1. The extent of substitute labour
   - Barriers to entry
   - Unemployment and underemployment

2. Occupational mobility
   - Extent and quality of remuneration package
   - Non-pecuniary benefits
   - Economic costs of taking job
   - Given information about the job, and how to perform the job

3. Geographical mobility
   - Economic costs of relocating
   - Willingness to move locally, nationally and internationally
   - Willingness to sever social, cultural and family ties
   - Information on final destination

I postulate that the labour supply in Singapore’s finance industry will be inelastic for a number of reasons that will be analysed in the following discussion.

To illustrate the extent of inelastic labour supply in the finance industry I will consider how closely the finance industry conforms to the factors in the table below before summarizing the results in the conclusion.

<table>
<thead>
<tr>
<th>The theory of inelastic labour supply</th>
<th>Finance industry – I postulate that</th>
</tr>
</thead>
<tbody>
<tr>
<td>Substitute Labour</td>
<td>Substitute Labour</td>
</tr>
<tr>
<td>No substitute labour</td>
<td>There will exist little substitute labour.</td>
</tr>
<tr>
<td>Occupational Mobility</td>
<td>Occupational Mobility</td>
</tr>
<tr>
<td>No mobility</td>
<td>There will be low occupational mobility.</td>
</tr>
<tr>
<td>Geographical Mobility</td>
<td>Geographical Mobility</td>
</tr>
<tr>
<td>No mobility</td>
<td>There will be low geographical mobility.</td>
</tr>
</tbody>
</table>

Note:
- For diagrams related to bankers in the finance industry, data was obtained from Appendices Figure 5.1
- For diagrams related to recruiters, data was obtained from Appendices Figure 5.2
- For diagrams related to teachers, data was obtained from Appendices Figure 5.2.

⁵ www.bized.co.uk/educators/1619/economics/wages/presentation/labmarket1.ppt
[2.2] Factor 1 – Extent of Substitute Labour

The theory of elasticity of labour supply attributes the number of readily available, possible substitutes\(^6\) for a firm’s workforce as a determinant of elasticity. Labour supply can be viewed from an individual, industry or economy standpoint.

In an industry with relatively elastic labour supply, businesses may be able to hire new labour (the unemployed) and change the level of underemployment\(^7\) to increase labour supply if there are no barriers to entry. However in the finance industry this is not the case as potential labour is constricted by minimum entry requirements.

The Finance industry is divided into 6 main sectors – insurance, investment banking, commercial banking, retail banking, superannuation/ fund management and credit. A full bank provides all these services. “There are currently 30 full banks”\(^8\). These sectors all require specialized skills; however there is only a limited supply of potential labour that have the expertise to work in these sectors. This is a compounding reason for the inelastic labour supply within the Singapore finance market.

Consider the market demand curve\(^9\) and supply curves\(^10\) for labour in the finance industry below, with an equilibrium wage rate of \(E\) at workforce \(Q\).

Graph #1

Assume that a certain firm wishes to increase the number of people that work for it because demand for the firm’s services has increased from \(D\) to \(D_1\). If the industry has elastic labour supply then a small increase in the wage rate\(^11\) from \(E\) to \(E_1\) will lead to a large

\(^6\) Goods and services which are possible alternatives for the consumer, a change in the price of one will have an impact on demand for the other.

\(^7\) Occurs when people work but do not have opportunities sufficient to occupy them full time.


\(^9\) Shows the quantity demand for a range of possible prices and it normally slopes downwards to the right.

\(^10\) Shows the quantities producers wish to supply at a range of different prices and it normally slopes upwards to the right.

\(^11\) Is the price of labour.
increase from $Q$ to $Q_2$ in the number of people employed. However if the industry has inelastic labour supply, the same increase in the wage rate from $E$ to $E_1$ generates a much smaller increase from $Q$ to $Q_1$ in the number of employed. Thus in an industry with inelastic supply$^{12}$ of labour, to meet demand, a firm, must pay a relatively higher marginal cost$^{13}$ for every extra worker hired, than in an elastic industry.

This graph can also be used when considering the affects of mobility on labour supply – see sections [2.3] and [2.4].

There are 2 significant barriers to entry in the finance industry – minimum entry requirements and experience level. A higher degree is often needed to work in a professional industry and the finance industry is no exception. Moreover for senior positions within a bank, a certain amount of experience is required. These barriers to entry exist in part to keep wages relatively high to attract the most qualified and experienced labour. They also ensure that a particular quality of service is provided to consumers. When there is relatively limited supply of substitute labour, in the short run$^{14}$ a firm will not be able to expand its supply$^{15}$ quickly enough if these barriers to entry, exist.

In Diagram #1 from all those interviewed in banking, only one did not possess a university degree.

Diagram #1

![Diagram of Finance Industry Types of Degree]

The presence of barriers was reiterated by the 3 recruitment people surveyed, who said that only those with a minimum amount of experience would be considered for hire – refer to Diagram #2.

---

$^{12}$ The quantity supplied has a relatively weak response to a change in price.

$^{13}$ The cost of one extra unit of output.

$^{14}$ The time period in which at least one factor of production remains unchanged. It is often understood as the time period in which all production takes place.

$^{15}$ Is the quantity of a good or service that producers are both willing and able to provide.
These two barriers to entry contribute to the inelastic supply and are key reasons why the finance industry in Singapore hires foreign talent to fill positions. Demand for labour increases as the industry grows, yet supply in the short run cannot meet demand as it takes time to get either experience or a university degree. Therefore supply can only be expanded in the long run\textsuperscript{16}. If a finance firm requires labour in the short run it is likely that it will be required to pay higher premiums for workers. Furthermore, even in a highly educated society, Singapore’s firms realize that the majority of their workforce does not have the experience needed to meet the demands of senior positions. As a result higher premiums are paid to foreign talent to incentivize them to leave their country of residence and job. In the long run this experience can be transferred to the local workforce, thus reducing inelasticity.

It is possible for an industry with similar barriers to entry to have a significant difference in wage rates. Consider the comparison between teachers and finance industries in Diagram #3.

\textsuperscript{16} The period of time in which all factors of production can be varied. It is often understood as the time period in which all planning takes place.
The higher relative wage rate can be seen clearly in the difference in salaries of teachers at UWCSEA to employees in the finance industry. For a more specific understanding of the difference, an individual from each industry, with the same number of years of higher education, were asked for a closer range of their wage rate.

Individual A, from the teaching profession reported a salary between (S$ 100, 000 - to S$ 150, 000) whilst individual B from the finance industry reported a salary over S$ 450, 000. Both individuals were at similar levels of seniority in their respective fields. High wages are paid in the finance industry compared to teaching because even though there are similar barriers to entry, the finance industry is a profit driven sector whilst teaching is not.

[2.3] Factor 2 – Occupational Mobility

The second factor that affects labour supply in a market is occupational mobility\(^\text{17}\). A low occupational mobility contributes to inelastic supply and higher wages. As the finance industry is a specialized industry it is often not possible to attract appropriately qualified and experienced people from other industries, therefore there is relatively low occupational mobility. In an industry with low mobility of labour the supply of labour is relatively inelastic and as we observed from Graph #1 this will mean that a firm must pay a higher marginal cost for every extra worker that they hire.

The optimal situation for an individual firm is low labour turnover\(^\text{18}\) in their firm and high mobility of labour within the industry. In this way the firm can attract and retain the best talent (optimizing its chance of larger, sustainable profits). A firm ensures low labour turnover within the firm by ensuring that workers are satisfied, through:

1. The extent and quality of the remuneration package offered – it must be substantial enough to ensure that it keeps labour in its present position.
2. The provision of non-pecuniary benefits such as job security, promotional opportunities and overseas postings. These improve work ethic, increase firm loyalty and keep labour satisfied.
3. The reduction of the job’s social costs by reducing anti-social working hours, providing social events for staff to increase moral and cohesiveness and by providing pastoral support.
4. The provision of all necessary information and further education / training so employees can complete their job efficiently.

The Remuneration Package:

In the Singapore finance industry high wages are offered to provide adequate incentives for labour to work. Diagram #4 and Diagram #5 show that all those who took the questionnaire considered high wages necessary to incentivize workers to take positions within the bank. This is reinforced by the data obtained on what motivates workers in the finance industry.

\(^{17}\) The willingness and ability of people to move between types of jobs or occupations.

\(^{18}\) The extent of occupational mobility within the firm to movements outside the firm.
Bonuses, which are known to be a significant part of the economic incentive to work in the finance industry, contribute significantly to ensuring low labour turnover when they are high. Bonuses motivate staff to be more productive, recognize individual's achievements and can increase an employee's loyalty to the firm.

Non-pecuniary benefits:

The second consideration of any firm wishing to ensure low labour turnover is to ensure that workers are stimulated enough so as to provide their best quality service. If we consider the above 2 graphs we can observe the second most quoted motivator to work was opportunity. This supports the idea that if one keeps workers stimulated, they are happy and thus we assume productive. Individuals who do not feel recognized are likely to have relatively low loyalty to a firm and may move as they feel they may be wanted elsewhere. A firm in this position risks high labour turnover.
Social Costs:
The third consideration of any firm wishing to ensure low labour turnover is to take into account the social considerations of workers. High labour turnover can still occur in an industry with a high wage rate if the social costs of remaining in a job outweigh the economic benefits. A firm must either consider the social wellbeing of employees or provide higher wages to incentivize working in less desirable conditions (this situation is most often seen in very senior positions where the expectation is that you are available for work ‘24/7’).

*Diagram #6* shows us that employees are relatively satisfied with their job, which may indicate that the finance industry does to some extent take into account the non-economic wellbeing of its employees.

*Diagram #7* shows us that within the finance industry, the emotional considerations of employees are of relatively less importance to firms than the economic wellbeing of the bank. A bank probably feels that the economic tradeoff of high salaries compensates the need for consideration of social costs. While in the short run providing high remuneration packages creates low labour turnover, in the long run the social needs of employees may be equally as important in retaining labour.
There are 2 significant social costs that impact labour turnover – health and family. If an employee becomes seriously ill, due in part to work’s pressures, a unit of labour may reevaluate what is important in their life. Therefore, output\(^\text{19}\) is not only lost in the short run but in the long run that unit of labour may not return to work. The health concerns of employees must be a priority for firms. Furthermore, a firm must recognize that many employees have families – working anti social hours, going to late hour business meetings and social events at times conflict with the family. This increases dissatisfaction and may lead to high labour turnover. In both cases a firm needs to recognize that it is dealing with individuals if it wishes to maintain low labour turnover.

**Information:**

The fourth and final consideration of any firm wishing to ensure low labour turnover is to provide labour with all the necessary training and information to complete work efficiently. In the finance industry, employees (mid range to high level) are generally not only well qualified, but also have a wealth of business experience, indicating that, they consider their job important enough to invest time in both study and application. If a firm does not give consideration to this it may create an unsatisfactory environment and lose employees to other financial institutions.

It is apparent from *Diagram #8* that the finance industry provides the necessary tools for their employees to complete their job. It is in the firm’s best interests to provide these so labour works as efficiently as possible and profits are maximized. In the long run workers are satisfied and the firm maintains their labour force.

***Diagram #8***

*Do you consider yourself sufficiently trained/ prepared to do your job?*

| 1 person | Yes |
| 9 people | No |

Training (both general and firm specific) is essential for firms to maximize the efficiency of employees. However, a firm must be careful about what training they give employees. Too much general training may expand a workers skill set to the point where they can attract a higher wage and may move to another firm paying this wage. If a firm wants to

\(^{19}\) The end product of a firm, resulting from an economic process
ensure that employees have the right tools to do the job and that, they stay in the present employment they must focus more on firm specific training.

What motivates people to work and how work affects their life will affect mobility. A firm must also consider the following; motivation changes with age and it is individual dependant. Motivation also changes from economic status to the industry that one works in. For example, in one of the surveys a qualitative response stated “individuals in the Singapore finance industry do not have a very strong loyalty base to the firm they work for”, therefore labour turnover is higher than it otherwise would be as people do not feel strong attachments to their workplace. If a firm considers this it may need to pay more attention on the pastoral needs of employees to increase loyalty and thus decrease labour turnover.

[2.4] Factor 3 – Geographical Mobility

The third factor that affects labour supply in a market is geographical mobility. In an industry with low geographical mobility of labour, the supply of labour is relatively inelastic and as we observed from Graph #1 this will mean that a firm must pay a higher marginal cost for every extra worker that they hire.

There are a number of forms of geographical mobility, highlighted below in Figure 2.4.1. For the purpose of this analysis I will be focusing on permanent relocation, as this will have the largest impact on supply of labour. Due to the small size of Singapore and the extent of infrastructure, mobility within the metropolitan city of Singapore is not an issue.

\[\text{Figure 2.4.1}\]

<table>
<thead>
<tr>
<th>Duration</th>
<th>Reason for move</th>
<th>Production-related</th>
<th>Consumption-related</th>
</tr>
</thead>
<tbody>
<tr>
<td>Permanent</td>
<td>Labour migration</td>
<td>Housing adjustment</td>
<td>Amenity-led migration</td>
</tr>
<tr>
<td>relocation</td>
<td>(Inter- and intra-organisational moves)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time</td>
<td>Short-term assignments</td>
<td>Holidays</td>
<td></td>
</tr>
<tr>
<td>Circulation</td>
<td>Long-distance (weekly) commuting</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Daily</td>
<td>Commuting</td>
<td>Shopping</td>
<td></td>
</tr>
</tbody>
</table>

A firm always wants to create a situation where there is high geographical mobility in the global industry so it can recruit people from any geographical place. This not only

\[22\text{Quoted from interview conducted with Standard Chartered employee.}\]
\[21\text{The extent to which a factor of production such as capital or labor is able or willing to relocate or be relocated: } \text{http://encarta.msn.com/dictionary_561547185/geographic_mobility.html}\]
\[22\text{http://www.jrf.org.uk/bookshop/eBooks/JR141-geographical-mobility-family.pdf}\]
includes moving people within the company but recruiting from other companies in the industry.

Any firm that wishes to attract labour must provide a wage rate that makes it economically viable to work. In a market with potentially low geographical mobility it must also consider those barriers that prevent labour from relocating. There are two costs to moving that a prospective firm must consider – economic and emotional costs. Note that the large number of expatriates in the Singapore finance industry reflects that it is possible to overcome these costs.

**Economic Costs:**

One of the biggest financial burdens on people is housing. In order for a firm to attract labour it must consider the economic consequences of moving away, such as adjusting to housing prices in a different region, city, country or continent. Other costs include moving costs, such as airplane tickets and shipping personal belongings. The solution is relatively simple, as a firm can provide financial assistance to relocate.

From *Diagram #9* it can be seen that the majority of those interviewed said that they were provided relocation assistance to move. In a developed city such as Singapore it is unusual for firms to provide full relocation assistance, however they do provide it partially, usually in the form of a moving allowance. This a compounding factor for why high wages are paid in the Singapore finance industry.

*Diagram #9*

![Diagram](image)

**Emotional Costs:**

The other factors that are less in the firms control are emotional barriers to moving. Any firm must consider labours willingness to move, including their willingness to sever social, cultural and family ties. There are a number of ways a firm can relieve some of the burden, including providing support schemes for new employees and providing all possible information on the final destination of employees.
From *Diagram #10* it is clear that the majority of people questioned felt tied to the country where they had previously lived and worked. It can be inferred however that economic assistance helped those only partially willing to move to make the decision to relocate.

*Diagram #10*

**How willing were you to move country?**

- 3 people
- 2 people

From *Diagram #11* unsurprisingly it is clear that for most people friends and family are of high importance in their lives. To attract an employee to move, a firm must find ways to compensate moving away from friends and family. They must provide the necessary economic benefits, such as funding a trip home once a year for the employee and family.

*Diagram #11*

**What was the hardest thing to leave when you moved to Singapore?**

- Leaving family
- Leaving friends
- Leaving job
- Leaving city
Diagram #12

Were you given sufficient information on Singapore?

Diagram #12 tells us that not enough information is provided to employees on the country that they are being relocated to. However, Diagram #13 seems to suggest that this does not impact geographical mobility to the same degree as other factors. This could be due to the global connectedness of the world and the ease of access to information through the internet.

Diagram #13

Was the lack of information a problem in getting settled?

It is possible that people are not as affected by the amount of information they are given on Singapore because their financial remuneration package overrides these issues.

Mobility, as stated before, will differ from individual to individual. Factors such as social status, economic status and family situation will affect how willing people are to move and what degree of incentive is required to shift labour from its present position. If a firm can
focus on the factors that affect geographical mobility they can control to a degree the amount of mobility in the industry and thus positively affect their firm.

The evidence seems to suggest that there is relatively inelastic supply in the finance industry, due in part to the presence of relatively low geographical mobility. If a firm wishes to expand labour in the short run it will likely have to seek out expatriate labour. To make them mobile a firm is likely to have to provide a relatively higher incentive than it otherwise would with local labour.
3.0 Conclusion

[3.1] Summary Table – based on data obtained from questionnaires

<table>
<thead>
<tr>
<th>Inelastic Labour Supply</th>
<th>Finance Industry</th>
</tr>
</thead>
<tbody>
<tr>
<td>Substitute Labour</td>
<td>Substitute Labour</td>
</tr>
<tr>
<td>No substitute labour</td>
<td>Relatively little substitute labour due to barriers to entry</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Occupational Mobility</th>
<th>Occupational Mobility</th>
</tr>
</thead>
<tbody>
<tr>
<td>No mobility</td>
<td>Fairly low occupational mobility due to high wage and good working conditions</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Geographical Mobility</th>
<th>Geographical Mobility</th>
</tr>
</thead>
<tbody>
<tr>
<td>No mobility</td>
<td>Dependant on individuals, high geographical mobility is rare.</td>
</tr>
</tbody>
</table>

[3.2] Overall Conclusion

I hypothesized that the labour supply in Singapore’s finance industry would be inelastic. The data gathered provides some evidence to support this. As can be seen from the above table, it fits the affecting factors closely. Mobility however is ambiguous in its result due to the difficulty in obtaining effective data. It is clear that labour supply is affected by a multitude of factors and ascertaining to what degree a factor affects the labour supply is also ambiguous. However, from the data that I collated and analysed I can conclude that labour supply in Singapore’s finance industry is relatively inelastic.

The extent of labour supply needs perhaps to be put into context. Firstly, Singapore’s government economic policy is to make Singapore a regional hub for a number of sophisticated industries, including the finance industry. Therefore it needs qualified, experienced people. However, it only has a small local population, and whilst education is of a high standard it is reasonable to assert that it has not existed long enough to generate the sufficient number of qualified and experienced demanded of a finance industry regional hub. Secondly, the finance industry functions on a global scale and so it is necessary to bring in qualified, experienced labour from the global market irrespective of the local supply of labour. To attract these employees Singapore firms must pay a large premium on top of the high salaries required to compete with overseas salaries already paid to compensate for the emotional costs of leaving family and the economic costs of moving etc. This is why labour supply is relatively inelastic because it costs a lot of extra money to bring in those people.

Therefore in answer to my research question – “To what extent is the supply of labour in Singapore’s finance industry inelastic?” I believe that labour supply in the Singapore finance industry is fairly inelastic.

[3.3] Unanswered Questions

- By what degree does the presence of inelastic labour supply affect the wage rate?
- In light of the current financial problems, is the finance industry still a lucrative career choice?
- It would also be interesting to investigate the differences in results between teachers and bankers and compare teachers with economic / financial qualifications in more depth.
4.0 Bibliography


- Monetary Authority of Singapore [cited 25/09/2008] Available from World Wide Web:


  <http://books.google.com.sg/books/geographical+mobility+inelastic+supply/>


- Supply of Labour to Markets [cited 20/08/2008] Available from World Wide Web:
  <http://tutor2u.net/economics/revision-notes/a2-micro-supply-of-labour.html>

- The Labour Market [cited 29/07/2008] Available from World Wide Web:
  <www.bized.co.uk/educators/1619/economics/wages/presentation/labmarket1.ppt>\(^{25}\)


- Geographical Mobility [cited 28/07/2008] Available from World Wide Web:
  <http://encarta.msn.com/dictionary_561547185/geographic_mobility.html>

---

\(^{23}\) Used for background research on labour supply.

\(^{24}\) Used for definitions unless stated otherwise.

\(^{25}\) Used for background research on factors affecting labour supply.
5.0 Appendix

*Appendices Figure 5.1*

**Bankers Questionnaire**

Gender:

Nationality/Country of Origin:

Local ☐ Developed Financial market ☐ Developing Financial market ☐

Age Range: 20-30 ☐ 30-40 ☐ 40-50 ☐ 50-60 ☐

**Economic Considerations**

1) What degree(s), if any, do you have?

   How much did the higher qualifications cost (nearest 10K) **OR** what country did the higher qualification come from?

2) How many years have you spent in higher education (university, college, technical institution etc.)

3) What fulltime job do you currently hold?

4) How many years have you worked in your chosen career?

5) What sector of the finance industry are you employed in? Be as specific as possible.

6) What were the **two** main motivations for your choice of career, in order of priority?

<table>
<thead>
<tr>
<th>Money</th>
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<tbody>
<tr>
<td>Lifestyle</td>
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<tr>
<td>Parents</td>
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<tr>
<td>Scholarship</td>
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<td>Opportunity/ Luck</td>
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<tr>
<td>Vocation</td>
<td></td>
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<tr>
<td>Other</td>
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</tbody>
</table>

   If other is labeled as 1 or 2 please explain:

7) If you have moved from your home country what motivated your move to Singapore and what have been the costs/sacrifices?

8) If your pay was increased by 10% do you believe this would motivate you to work harder and for longer hours?
9) For each of the following 3 scenarios please advise the percentage salary decrease that you would expect to suffer upon moving to the next best paid job for your skills (ensure that you take into consideration tax and cost of living adjustment):
   1. moving to home country in same role
   2. moving to different job in different part of the Singapore Finance sector for e.g. banking to insurance
   3. moving to different job in different sector in Singapore for e.g. a move to corporate

<table>
<thead>
<tr>
<th>Scenario</th>
<th>1</th>
<th>2</th>
<th>3</th>
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<tbody>
<tr>
<td>Less than 5%</td>
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</tbody>
</table>

For each scenario briefly say why you think this is so?

10) When the economy/finance industry is performing well in a strong economic period do you:
   a. find it difficult to hire the right people for your business, and
   b. find the salary increase required to get the right people for your business is high i.e. above 15%

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<thead>
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<th>b.</th>
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<tr>
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Why do you believe this is so?

11) Any other comments?

12) Optional Question - What income bracket do you fall under (S$)?

<table>
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<tr>
<td>Up to 100,000</td>
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<td>More than 200,000</td>
</tr>
<tr>
<td>Do not wish to say</td>
</tr>
</tbody>
</table>

Social Considerations

13) Do you feel satisfied in your current job?

| Yes |     |
14) Do you feel you are provided with the following...

Emotional consideration by your firm:

Yes  
No

Enough work related opportunities:

Yes  
No

A high enough wage:

Yes  
No

Sufficient training and information to complete your job

Yes  
No

15) How willing were you to move?

Very  
Partially  
Not at all

16) What was the hardest thing to leave when moving country?

Leaving family  
Leaving friends  
Leaving city  
Leaving job

17) Were you provided relocation assistance when you moved to this job?

Yes  
No

18) Were you provided with enough information on Singapore when you arrived?

Yes
No

If you answered No was this a problem?

Yes
No

Thank-you for your time

Appendices Figure 5.2

Recruiters Questionnaire

Gender:

Nationality/Country of Origin:
Local □ Developed Financial market □ Developing Financial market □
Age Range: 20-30 □ 30-40 □ 40-50 □ 50-60 □

1) What fulltime job do you currently hold?

2) How many years have you worked in your chosen career?

3) Typically how many years have been spent in higher education (university, college, technical institution etc.) by people you recruit for the finance industry

4) Typically how many years finance experience do people you recruit for the finance industry in Singapore have? Does this make any difference to the extra money they earn, if any, in the finance industry?

5) Typically what are the two main motivations for finance industry career choice that you see?

| Money | 
| Lifestyle |
| Parents |
| Scholarship |
| Opportunity/ Luck |
| Vocation |
| Other |

If other is labeled as 1 or 2 please explain:

6) Typically why do people move from their home country to Singapore finance industry and what do they give up?

7) For each of the following 3 scenarios please say the percentage salary decrease that you would expect people to suffer by:
4. moving back to home country in the same role (factor out cost of living adjustment, if any)
5. moving to different job in different part of the Singapore Finance sector e.g. banking to insurance
6. moving to different job in different sector in Singapore e.g. move to corporate

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For each scenario briefly say why you think this is so?

8) When the economy/finance industry is performing well in a strong economic period do you:
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Why do you believe this is so?

9) Any other comments?

Thank-you for your time

Appendices Figure 5.3

Teachers Questionnaire

Gender:

Nationality/Country of Origin:

Local □ Expat □

Economics teacher □ Business teacher □

Age Range: 20-30 □ 30-40 □ 40-50 □ 50-60 □

1) What degree(s), if any, do you have?

How much did the higher qualifications cost (nearest 10K) OR what country did the higher qualification come from?
2) How many years have you spent in higher education (university, college, technical institution etc.?)

3) How many years have you worked in your chosen career?

4) What were the two main motivations for your choice of career, in order of priority?

| Money |  |
| Lifestyle |  |
| Parents |  |
| Scholarship |  |
| Opportunity/ Luck |  |
| Vocation |  |
| Other |  |

If other is labeled as 1 or 2 please explain:

5) If you have moved from your home country what motivated your move to Singapore and what have been the costs/sacrifices?

6) If your pay was increased by 10% do you believe this would motivate you to work harder and for longer hours?

Yes |  |
No |  |

7) For each of the following 3 scenarios please advise the percentage salary decrease that you would expect to suffer upon moving to the next best paid job for your skills (ensure that you take into consideration tax and cost of living adjustment):

7. moving to home country in same role
8. moving to different job in different part of the Singapore education sector for e.g. UWC to ISS
9. moving to different job in different sector in Singapore for e.g. a move to corporate

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For each scenario briefly say why you think this is so?

If you are involved in interviewing new staff please answer question 8

8) Currently do you:

a. find it difficult to hire the right people for positions
International Baccalaureate Economics Extended Essay

b. find that salary is a motivating factor for the applicant

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Why do you believe this is so?

9) Any other comments?

10) Optional Question - What income bracket do you fall under (S$)?

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Thank-you for your time

Appendices Figure 5.4

**Recruiters + Bankers Interviews**

1. What % increase do you need to pay to attract the right people?

2. What’s more important qualifications or experience and does that change with seniority?

3. Is labour in short supply in Singapore?

4. How does the bank attract people from other sectors and occupations?

5. How does the bank attract people from other countries?

6. What % of the bank have degrees?

7. Do you find it difficult to attract people from other countries, why?

8. General discussion…
<table>
<thead>
<tr>
<th>Assessment criteria</th>
<th>Achievement level</th>
<th>First examiner</th>
<th>maximum</th>
<th>Second examiner</th>
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<tbody>
<tr>
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<tr>
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<td>C investigation</td>
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<td>D knowledge and understanding</td>
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<td>E reasoned argument</td>
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<td>2 ✓</td>
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<tr>
<td>F analysis and evaluation</td>
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<td>2 ✓</td>
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<tr>
<td>G use of subject language</td>
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<td>H conclusion</td>
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<td>I formal presentation</td>
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<td>K holistic judgment</td>
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Total out of 36: 28 ✓

On a positive note, the candidate has attempted a difficult task - not a run of the mill one.

However, the overall gained and analyses does not seem adequately linked to the actual research question - it should probably have been more on the supply of lessons rather than exchange of supply.

Name of first examiner: ____________________________  Name of second examiner: ____________________________
(CAPITAL letters)  (CAPITAL letters)
Examiner number: 2425
Examiner number: ________