

Money, Work–Life Balance and Autonomy: Why do IT Professionals Choose Self-Employment?

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Abstract This article deals with the reasons why IT professionals chose self-employment, as well as advantages and drawbacks of this form of employment. A growing number of workers in industrialized countries are now self-employed, most notably in the IT sector. In order to understand this trend better, we carried out a quantitative survey in collaboration with a professional association of independent IT workers in Quebec (Canada). We examined the different reasons why self-employment is attractive for IT professionals, the advantages they experience and the disadvantages they point out. While some authors postulate that self-employment is attractive because it facilitates work–life balance, our results show a strong predominance of the financial advantages and a weak impact of factors related to work–life balance. We also find high levels of job satisfaction, but the effects on work–life balance remain indirect.

Keywords Self-employment · IT professionals

A growing number of workers in industrialized countries are now self-employed. In Canada, self-employment registers the strongest increase among all forms of employment. In 2007, self-employment rose three times faster than paid employment (i.e. +4.5%; Tal 2008). In this research, we studied self-employed professionals in the IT sector. Indeed, they appear particularly representative of the evolutions of work and employment in the “knowledge economy” (Ang and Slaughter 2001; Cappelli 2001). The sector of computer services is very dynamic in Canada (Tal

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2008), and self-employed IT professionals generally earn more than their salaried counterparts (Cappelli 2001; Kunda et al. 2002), whereas on average self-employed earn less than 80% the income of salaried employees (Tal 2008). Based on the “push” and “pull” explanations, we examine the different reasons why self-employment is attractive for IT professionals, the advantages they experience and the drawbacks they point out. The results of previous researches diverge on the advantages and disadvantages of self-employment. While some authors postulate that self-employment is attractive because it facilitates work–life balance, others insist on an increased work–family conflict. Our results underline the importance of “pull” factors in the choice of self-employment, financial advantages in particular. We also find high levels of job satisfaction, but the effects on work–life balance remain unclear for this particular category of workers.

Theoretical Framework

Self-Employment

Social, economic and political actors agree that there is no single definition of self-employment. Although the expression “self-employed worker” is most commonly used, the independent person may be distinguish from other self-employed persons who hire help. In the last census, Statistic Canada included in the self-employment category those persons who operate a farm either as owner or tenant; workers, for example freelancers or contract workers (architects, private nurses); franchise or concession holders in the sale or direct distribution of products such as cosmetics, newspapers, brushes or household products; and those who fish, either with personally owned equipment or equipment in which they are co-owners. This is quite a large definition and it probably explains why general factors related to self-employment do not always apply to specific categories. This led us to study a specific professional category which may represent self-employment in the knowledge economy.

Work activities involved in the self-employment concept cover more ground and include the entrepreneur or contractor, the freelancer or the tradesperson, professionals remunerated per consultation or contract and day workers. In the framework of our research, and in keeping with Delage’s investigation on independent work (Delage 2002), we shall consider self-employed the following: independent workers (self-employed and without hired help), self-employed workers who hire a very small number of associates—mostly casual freelancers under contract (translators, etc.)—and professionals in co-partnership on an individual basis.

Self-employment presents the strongest increase among the various forms of employment (Tal 2008). The percentage of self-employed in Canada represents nearly 16% of all workers, 13% in Québec (OCDE 2003). The national average is close to that of most industrialized countries overall, although some countries do have a little more. According to Canadian data, non-farm self-employment has become the primary source of new jobs in Canada (Moore and Mueller 2002; Tal 2008). A majority of self-employed workers are active in the service sector and the increase in their number is stronger than in the manufacturing sector. To conclude, it seems that

more and more workers will be self-employed in the coming years. To explain the context in which professionals decide to go on their own, two models are generally used: the “push” factors and the “pull” factors (Peel and Inkson 2004).

Push Factors

Self-employment is motivated by “push” factors, unemployment for example, when it is the best or the only option available. Moore and Mueller (2002) found that long periods of unemployment tend to push to self-employment. The absence of unemployment insurance is also an incentive for self-employment; unemployed who benefit from insurance appear less likely to become self-employed. However, those who left their last job for personal reasons are significantly more likely than others to become self-employed, followed by those who lost their last job involuntarily (layoffs, cuts), and by those who left it voluntarily (for reasons other than personal). The unemployment rate does not seem to have significant influence on self-employment (Kirchoff 1996). Noorderhaven et al. (2004) found that unemployment has a negative rather than a positive influence on self-employment. According to them, the level of dissatisfaction regarding society and life in general has a stronger impact on self-employment than unemployment. In short, few studies provide evidence for the predominance of “push” factors to explain the increase of self-employment in Canada. Some authors underline the heterogeneity of motivations for self-employment, since “push” and “pull” factors are both important (Beaucage et al. 2004; Feldman and Bolino 2000; Peel and Inkson 2004).

Self-employment is sometimes considered as a possible solution to counter the negative consequences of the ageing workforce in industrialised countries. However, Curran and Blackburn (Curran and Blackburn 2001) conclude that health problems and the lack of energy are the two main reasons why older workers are not attracted by self-employment. Parslow et al. (2004) add that self-employment does not provide benefits in term of health or wellbeing. Indeed, self-employment tends to increase the level of stress. On the other hand, a survey on 1,805 retired workers of Bell Canada concludes that lateral mobility in the last job—in contrast with vertical mobility—is inversely proportional to the choice of self-employment at the age of retirement (Singh and Verma 2003). Furthermore, according to Devaney and Kim (2003), self-employed workers often do not have pensions; consequently many have no choice but to stay on the labour market (Tremblay et al. 2007b).

As Montgomery, Johnson and Faisal (Montgomery et al. 2005) suggest, the availability of financial capital should not be neglected, since it is a key element to start up a business and to keep it running. On the other hand, the results of Galt and Moennig (1996) on British data, do not confirm that governmental support, as an economic incentive, can explain in itself the growing number of self-employed workers. Non economic factors and organizational changes then appear to be important predispositions for self-employment, even if they are more difficult to identify and cannot be directly used as a levy to foster self-employment by governmental support. According to Dennis Jr. (1996), individuals become self-employed because they want it and not because it is the only available option (they prefer self-employment to other working arrangements). Beaucage et al. (2004) found a complexity of motivations and circumstances leading up to self-employment. Therefore considering the diversity of

views, it is appropriate to explore the influence of “pull” factors in the choice of self-employment.

Pull Factors

Self-employment may offer stimulating career opportunities through a greater job satisfaction and a higher resilience to high stress (Bradley and Roberts 2004). Some studies state that self-employed WORKERS report more job satisfaction than employees (Blanchflower 2000; Hundley 2001; Parasuraman and Simmers 2001). For Hundley (2001), self-employed workers are more satisfied because their job allows them more flexibility and autonomy, while developing their skills and abilities. Peel and Inkson (2004) add that self-employment provides better opportunities for personal development. Lastly, Finnie and Laporte (2003) show that self-employment can be a very lucrative form of employment. Lévesque et al. (2002) moderate the relevance of this finding. According to them, individuals do not have a constant attitude regarding the attributes of self-employment. Attitudes regarding the income, risk and independence change with age and can also be influenced by the level of education and the access to resources. Finally, some disadvantages of self-employment must be underlined, in particular the isolation and the lack of professional training (Delage 2002).

According to Boden Jr. (1999a), family considerations and an increased flexibility strongly influence the choice of women for self-employment. This differs from the reasons why men would choose it. In another study, the same author argues that women bear more family responsibilities than men, particularly with regard to childcare. According to him, this influences their decision to work on their own (Boden Jr. 1999b). In addition, Hundley (2001), as well as Burke et al. (2002) explain the huge income differences between men and women in self-employment, by the fact that women still have to deal with more family responsibilities than men, which leaves them less time for paid work. In a good number of studies, women particularly insist on childcare and family commitment to justify their choice of self-employment (Boden Jr. 1999a, b; Holmes et al. 1997; Loscocco 1997). Among these reasons, the desire to have children and/or to spend more time with them prevails. Anthias and Mehta (2003) notice that women tend to choose self-employment because they still take the lion’s share in the domestic sphere; then they need flexible work arrangements to organize themselves for childcare. Heilbrunn (2004) also confirms that women entrepreneurs are more likely than men to be attracted by self-employment or entrepreneurship because of their family responsibilities.

Parasuraman and Simmers (2001) indicate that self-employed workers benefit from higher levels of autonomy and flexibility than employees. Nonetheless, self-employed workers report higher levels of work–family conflict, probably due to higher levels of job commitment. It is also possible that self-employed workers perceive higher levels of parental demands when they stay home to spend more time with their children, which can increase work–family conflict (Tremblay et al. 2007a). Moreover, according to Parasuraman and Simmers (2001), self-employed workers report stronger psychological commitment in their professional role, because they bear the entire responsibility of their business survival. In short, according these authors, self-employment has ambiguous effects on work–life balance. Parasuraman

and Simmers (2001) reject the idea that self-employment is a solution for work–life balance, but they consider one can find a certain compromise in this work arrangement. Indeed, high levels of job commitment combined with high levels of parental demands, may generate incompatible pressures for home-based self-employed. In such a context, autonomy and/or flexibility are no satisfying solutions to work–family conflict.

Christensen (1987) indicates that telework can create a work–family conflict because of the presence of work material in the house and because family members can interfere with work. However, other research (Felstead and Jewson 2000; Tremblay 2003) reports that there are minor adjustments at the beginning but that home-based self-employed manage to separate work and family life quite well over time. Teleworkers set down rules with their family in order not to create interferences within their work. Felstead and Jewson (2000) add that women report more difficulties than men to separate work and family in the context of telework.

Loscocco (1997) found that self-employed workers are very satisfied with the flexibility they experience. However, women are more likely than men to mention work–life balance as a positive consequence of this flexibility. According to the same author, the professional sphere of women tends to be “contaminated” by the family sphere, whereas the opposite situation prevails for men and this, even for a population of self-employed workers. Felstead and Jewson (2000) observed the same phenomenon. Parental and professional identities appear to be key factors to understand work–family interferences in self-employment. Path dependencies related to family life (birth of the children, nursery, school, adolescence, etc) and career path (start up, maturity, preparation of retirement, etc) are also important variables to analyse. Finally, let us mention a survey carried out by Ipsos-Reid on behalf of the Royal Bank of Canada. Though it is not an academic research, this survey indicates that 36% of men who wish to set up a business would do so for money, compared to only 23% of women. On the other hand, 63% of women would like to start their business in order to have more flexibility and this is also the case for 51% of men (Royal Bank of Canada 2005).

Many authors report huge differences between the reasons why men and women choose self-employment. Holmes et al. (1997), for example, found that men are more likely to become self-employed because of retirement and the possibility to reduce their working time (*retrenchment*), while women are generally more focused on family (children, etc.). Anthias and Mehta (2003) indicate that men go on their own because of the financial gains and the increased control over their activities. On the other hand, women are more motivated by personal and symbolic factors in relation with their life project, for example independence or personal development. Moreover, Heller Clain (2000) reveals differences between men and women in full-time self-employment: self-employed women generally have competences less valued on the labour market than salaried women; whereas the opposite situation prevails for men. The study suggests that women who choose self-employment value less the financial aspects than men who make the same decision. So, financial and family factors seem to weigh very differently for men and women in the choice of self-employment.

Baines and Gelder (2003) analyse the impact of self-employment on work–family life, from the perspective of children and young people. They divide the temporal

arrangements in families of self-employed workers into four types: *time greedy*, *rigidly scheduled*, *flexibility scheduled* and *work–family inclusive*. For the *time greedy*, work–life balance is very difficult. According to Baines and Gelder (2003), this is a group composed by many self-employed fathers and some self-employed mothers. For *rigidly scheduled*, the dilemma between earning more and spending more time with the family is very similar to the one faced by employees. For this group, home-based self-employment is rare and their work schedules are close to the ones of employees, as they also work long hours. The article indicates that in the case of home-based self-employment, family members are often integrated into the routine of work, which is something very rare in conventional forms of employment.

Studies often diverge on the motives of choice of self-employment, as well as on its advantages and drawbacks. Some authors underline that work–life balance is facilitated by a better control on one’s time in the context of self-employment, while others stress additional constraints and strain. The choice of self-employment should thus be put in perspective with the perceived advantages and drawbacks of this form of employment after some years of experience.

In order to study the perceptions of self-employment, we chose an occupational group of IT self-employed professionals in Quebec (Canada). As self-employed *knowledge workers*, they seem particularly representative of the evolutions of work and employment in the 21st century. To our knowledge, there are very few studies on self-employed IT professionals in Canada. Finally, the purpose of this research is:

- 1) To determine the weight of “pull” and “push” factors in the choice of self-employment in the IT sector
- 2) To identify the perceived advantages and disadvantages of self-employment
- 3) To clarify the relationship between self-employment, work–life balance and gender.

To sum up the conclusions of previous researches (Anthias and Mehta 2003; Heller Clain 2000), we can conjecture that self-employed IT professionals tend to choose self-employment because of their value on the labour market. Self-employment would then provide them with a better income and an increased control over their work and activities. Moreover, we expect differences between the motivations, the perceived advantages and disadvantages of men and women (Boden Jr. 1999a, b; Heller Clain 2000; Loscocco 1997).

Method

In this paper we present the results of a survey by questionnaire carried out in collaboration with the professional association of IT self-employed workers in Quebec (AQIII: Association Québécoise des Informatiennes et Informaticiens Independants). The data were collected via Internet during the spring of 2007. An e-mail was sent to the 700 members of the association. It contained a hypertext link giving the members access to an on-line questionnaire.

The respondents represent 28% of the total population of the AQIII members. There were a total of 116 participants who responded all questions, with a final retention rate of 59% throughout the questionnaire. The percentage of women in the total population of AQIII members is 11%. In the study, 18% of the participants

were women, so women are actually over-represented in the sample. The respondents are quite young: 71% of the participants were less than 44 and 53% were between 35 and 44 years old. Also, 80% of the respondents were living with a partner or spouse and 55% with dependent children. Finally, 83% of the participants work alone; they have neither employees, nor subcontractors. On average, the respondents have been self-employed for 7 years and a half, whereas the average experience in IT is of 17 years. This means that a large majority of participants had a solid experience in IT before becoming self-employed.

The questionnaire starts with general socio-demographic questions (age, gender...). The respondents were asked to specify their family situation (i.e. day-to-day situation). They were also asked to specify the number of children living with them and the age of the youngest. We considered dependent children under 12 (because according to Canadian Law, children older than 12 can stay alone). Moreover, they were asked to indicate their annual income and hourly rate. The questionnaire aimed at assessing the motivations for self-employment. In order to do so, the respondents were invited to evaluate the importance of different motivations on a Likert's scale in five points (5 = very important; 1 = not important). The list of motivations for self-employment integrates the results of different studies (Delage 2002; Peel and Inkson 2004; Tremblay et al. 2007a):

Push factors:

- Unemployment
- Difficulty to find a job meeting my aspirations
- Desire to be my own boss
- Dissatisfaction with my former job (nature of job, relations with colleagues and superiors)
- Precariousness of my former employment (status)

Pull factors:

- Presence of young children
- Desire to work with my spouse in the family firm
- Desire to change career or profession (reorientation)
- Desire to have more flexibility in my working time and organisation
- To improve my income
- Retired or pre-retired, but do not want to stop working

The respondents were also asked to express their agreement or their disagreement on a list of advantages and disadvantages of self-employment. Every item was assessed on a Likert's scale in 6 points (completely true = 6; completely false = 1). The list of advantages and disadvantages of self-employment again comes from different studies (Delage 2002; Peel and Inkson 2004; Tremblay et al. 2007a).

In your situation of self-employed worker, is it true that you benefit from the following advantages?

Independence and freedom (no link with an organization or an employer)
 Flexibility in working time
 More productive
 Possibility to telework

Autonomy in the way I carry out the job
 Better income
 Possibility to work more to compensate periods without contracts
 Tax benefits
 To balance work and family
 To balance work and other personal activities
 Variety of tasks and challenges

In your situation of self-employed worker, do you experience the following disadvantages?

Absence of marginal social benefits
 Work alone, isolation
 Lack of professional training and sources of information
 Negative attitudes of family and friends toward self-employment
 To work simultaneously on more than one contract
 To have to accomplish various administrative tasks (accountancy, marketing, purchases, taxes)
 Fear to lack contracts or insecurity due to unstable income
 Interference of work with personal life
 Stress (in general)
 Unsatisfying income
 To have to work long hours
 No paid holidays

The respondents were also asked to answer questions on job satisfaction (“I am satisfied with my job”; “I am motivated by my job”) and on work–life balance adapted from Netemeyer et al. (1996), in order to evaluate the congruence between the perceived advantages and drawbacks of self-employment and job satisfaction. We used SPSS 12.1 for the statistical analysis.

Results

Motivations for Self-Employment

With principal component analysis, we found four factors that summarize the motivations for self-employment.

The first one includes ‘pull’ factors associated to the characteristics of self-employment in the IT sector (better income and more flexibility) and to the presence of young children. This factor is called PULL 1.

The second includes “push” factors which are not directly linked to the absence of opportunities in salaried employment, but generated by dissatisfaction in the former employment. It is composed by the following items: desire to be one’s own boss and dissatisfaction with the former job. We called this factor DISSATISFACTION.

Unemployment, precariousness of the former employment and difficulties to find a job meeting one’s aspirations constitute the third factor, called PUSH.

A last set of “pull” factors is related to carrier transitions. It is composed by the following items: desire to work with my spouse in the family firm, desire to change

career or profession, retired or pre-retired, but do not want to stop working. This factor is called PULL 2.

We used the mean values (scores) derived from principal component analysis to measure the relative importance of each factor. We conducted *t*-tests to verify that there were significant differences between the “push” and “pull” factors for self-employment (PULL 1, DISSATISFACTION, PUSH and PULL 2). The results indicate that there are significant differences (Table 1).

Factor PULL 1 is by far the most important (4.5 out of 5 on average). Indeed, the desire to improve one’s income comes first in the list of motivations for self-employment; over 90% of the respondents consider this motivation important or very important. Contrary to the average self-employed workers, the hourly rate of self-employed in the IT sector is much higher than the hourly wage of corporate professionals. According to our respondents, this difference offsets the risks of self-employment; it also compensates for the periods of inactivity. In addition, self-employment provides certain financial advantages, principally as regards taxation. The desire to have more flexibility in working time is the second most important motivation for self-employment: more than 65% of the respondents consider this motivation important or very important. Thus, the predominance of the factor PULL 1 indicates that “pull” factors generally weighted more than “push” factors for our respondents at the time they decided to become self-employed.

Secondly, dissatisfaction with salaried employment tends to lead to self-employment. Over 45% of the respondents say the desire to be one’s own boss was an important or very important motivation for self-employment. Nevertheless, the factor DISSATISFACTION (desire to be one’s own boss and the dissatisfaction with the former job) only has a moderate impact on the choice of self-employment (2.8 out of 5).

The factor PUSH (unemployment, precariousness of the former employment and difficulties to find a job meeting one’s aspirations) is less important in the choice of self-employment, with an average score of 1.5. For some respondents, self-employment may appear as a “solution” to the precariousness of the former situation. However, these cases are quite rare; this is maybe due to the expertise and the value of IT professionals on the labour market. Moreover, the job gain in the IT sector was of 35% between 2006 and 2007 (Tal 2008) and this is similar to the last decade, where job growth has been quite high. Therefore, the factor PUSH will likely have a moderate impact on the choice of self-employment for our sample of IT professionals.

The items in factor PULL 2 are largely marginal since they only register an average score of 0.6. This factor associated with career transitions is clearly a less important motivation for self-employment, since it concerns only between 3% and 5% of our respondents.

Table 1 Motivations for self-employment (scores)

	N	Mean	Std. deviation	Std. error mean
PULL 1	114	4.456	1.4808	.1387
DISSATISFACTION	114	2.781	1.4559	.1364
PUSH	114	1.497	1.2187	.1141
PULL 2	114	.591	.7859	.0736

Factor PULL 1 is the most important motivation for self-employment. It is followed by factors DISSATISFACTION, PUSH and finally by the factor PULL 2. Factor PULL 2 is very specific to career transitions, which may explain why it comes last to the list. These results indicate that the analysis in terms of “push” and “pull” factors is somehow insufficient to capture the complexity of motivations for self-employment in the IT sector. Indeed, factor PULL 1 has the higher mean whereas factor PULL 2 has the lowest. However, it clearly appears that only a little minority of respondents has been pushed to self-employment, especially those older than 55. This leads us to conclude that IT professionals generally go on their own because they want it and not because it is the only option.

In order to describe the effects of socio-demographic variables on the motivations for self-employment, we conducted correlation analyses between the four factors with gender, age and, the family situation (dependent children younger than 12 and single or couple, see Table 2).

Surprisingly, no significant differences between men and women were found in the motivations for self-employment. This is an interesting result since other studies report huge divergences between the motivations of men and women for self-employment. Thus, the motivations of IT professionals for self-employment are very similar to the motivations observed for highly qualified men (financial advantages and autonomy). They differ from the motivations for self-employment generally reported by women (childcare and family responsibilities). This may be explained by the composition of our sample—men in majority—but not only.

The motivations related to family responsibilities, such as the presence of young children, are not considered very important by our respondents; only 11% declare this motivation was important or very important when they chose self-employment. Nevertheless, the presence of at least one dependent child is negatively correlated to the factor PUSH, which means it is more important in the choice of self-employment for people without dependents. Having a spouse or partner is correlated to the factor PULL 2, which is understandable given that one of the items was “to work with my spouse in the family firm”.

Age is correlated to none of the factors. However, when isolated, the importance of unemployment is positively correlated to age. Unemployment then appears to push IT professionals older than 55 to self-employment. They are more likely to choose self-employment as an alternative to unemployment, rather than as a way to retire progressively. This is an original and interesting result; to our knowledge, few studies have highlighted this aspect.

Table 2 Motivations for self-employment—Pearson correlations

	Pull 1	Dissatisfaction	Push	Pull 2
Couple	-.115	-.144	-.083	.226 ^a
Gender	.167	.087	.097	-.039
Age	-.015	.152	.142	.007
Dependent children	.117	-.083	-.276 ^b	.068

^a Correlation is significant at the 0.05 level (2-tailed)

^b Correlation is significant at the 0.01 level (2-tailed)

Finally, let us mention that more than 38% of the respondents had teleworked before becoming self-employed, and for nearly 13% of them, this experience led them to become self-employed. Thus, a positive experience of telework can marginally affect the choice of self-employment.

Advantages of Self-Employment

In line with the motivations for self-employment, its main advantage is better revenue. More than 85% of our respondents say the fact that they benefit from this advantage is “true” or “completely true”. This shows that the perceived advantages of self-employment are consistent with the initial motivations to become self-employed. In addition, the standard deviation of this variable is quite low. In other words, there is a relatively high homogeneity in the answers. This also confirms that the labour market is currently favourable to IT self-employed workers.

We conducted a principal component analysis, and found four groups of advantages of self-employment (Table 3). We also conducted *t*-tests to analyze paired differences among the four factors. The results show there are significant differences between them, except between the factors ‘independence’ and ‘absence of routine’.

The first factor consists in the financial advantages of self-employment: better income and tax benefits. According to our respondents, better income is the most important advantage of self-employment; moreover, 57% of them agree that they benefit from tax advantages. This factor is called ‘financial’.

The second factor is associated to the absence of routine. It refers to the following items: variety of tasks and challenges and possibility to work more to compensate periods without contracts. It is called ‘no routine’.

The third factor includes variables dealing with autonomy and independence: independence and freedom, flexibility in working time, more productive, possibility to telework, and autonomy in the way I carry out the job. Self-employment provides an increased control on work practices and schedules. Between 64% and 34% of the participants answered “true” or “completely true” when asked if they benefit from these advantages. This factor is called ‘independence’.

Finally, the items related to work–life balance form a last factor, called ‘balance’ (to balance work and family and to balance work and other personal activities). Approximately 31% of the respondents estimate that self-employment enables a better balance between work and the other times of life.

If work–life balance certainly is an advantage of self-employment (with a mean of 3.5 out of 5), it comes last in the list. Our respondents seem to fully benefit from the advantages of self-employment in terms of income and flexibility/control; however work–life balance is a less obvious benefit for them. Thus the perceived advantages of self-employment fit with the advantages usually reported by self-employed men (financial profit and control on work). On the other hand, they differ from the advantages generally mentioned by women (work–life balance). This may be explained by the over-representation of men in the sample. Nevertheless, when analysing the motivations to become self-employed, no significant differences were found between men and women. The same phenomenon is observed for the perceived advantages of self-employment (Table 4). According to previous researches, we expected women to give more importance than men to the advantages related to work–life balance.

Table 3 Advantages of self-employment (scores)

	N	Mean	Std. deviation	Std. error mean
Financial	113	4.9912	.79615	.07490
No routine	113	4.3628	1.23427	.11611
Independence	113	4.3363	1.00757	.09478
Balance	113	3.4513	1.62701	.15306

However, self-employed women in the IT sector perceive the same advantages as their male counterparts (financial advantages and independence). Consequently, the characteristics of the sector and the value of IT professionals on the labor market may neutralize the influence of gender on the perception of the advantages of self-employment.

Lastly, the family situation is correlated to the perception of work–life balance (Table 4). Living with a spouse or partner and dependent children significantly increases the importance attached to work–life balance. In other words, work–life balance is not the most valued advantage of self-employment, but respondents with family responsibilities value this advantage more than other respondents, which can indicate that self-employment actually facilitates work–life balance, at least, it does not generate work–family conflict. No correlation was found between demographic characteristics (gender, age and family situation) and the other advantages of self-employment.

Disadvantages of Self-Employment

With principal component analysis, we found three factors to summarize the disadvantages of self-employment (Table 5). Due to their very low scores, we decided not to consider the items ‘unsatisfying incomes’ and ‘negative attitudes of family and friends as disadvantages of self-employment’. Indeed, only 3% of the respondents declare they are dissatisfied with their income. This is coherent with the perceived advantages of self-employment, since a better income is in first position. With a very low average (1.9 out of 6), the negative attitude of family and friends cannot be considered as a disadvantage of self-employment in the IT sector.

The first factor is composed by items linked to the lack of employment benefits due to the status of self-employed, i.e., the absence of welfare benefits, of paid holidays and the insecurity due to unstable income. These disadvantages are directly linked to the characteristics of self-employment: they are the negative counterpart of

Table 4 Advantages of self-employment—Pearson correlations

	Financial	No routine	Independence	Balance
Gender	-.035	-.065	-.032	.036
Age	-.023	-.079	.078	-.177
Dependent children	.021	.005	-.123	.261 ^b
Couple	-.175	.064	-.009	.224 ^a

^a Correlation is significant at the 0.05 level (2-tailed)

^b Correlation is significant at the 0.01 level (2-tailed)

independence and flexibility. However, the hourly rate of self-employed professionals is supposed to compensate for these statutory disadvantages.

The second factor is related to the strain and polyvalence generated by self-employment. According to our respondents, the main drawback of self-employment is to have to accomplish various administrative tasks. This group of disadvantages is also related to the polyvalence required by self-employment: to work on several contracts simultaneously, long working hours, stress and the interference of work with personal life. These disadvantages depend on the practices of self-employment. IT self-employed workers have to complete various tasks (accounting, etc.), sometimes very far from their original qualifications (IT) and for which they are not necessarily trained. The diversity of tasks and the fact of working for several clients at the same time thus require polyvalence. In addition, they are not paid for all the administrative and networking tasks they do, which can generate long working hours and stress, even interferences with personal life. To conclude, let us mention that 31% of our respondents declare that self-employment has increased their level of stress, 19% say it has decreased and 50% do not note any change compared to their former situation.

The last factor includes drawbacks associated with isolation, the lack of professional training and sources of information. These disadvantages are very marginal. Indeed, the fact of belonging to a professional association may limit the perception of isolation (Table 6).

No significant differences are observed between men and women regarding the perception of the various disadvantages of self-employment. Moreover, neither age nor the family situation has a significant impact on the perception of these disadvantages; except isolation that is negatively linked to dependent children. In other words, the fact of having one or more child under 12 moderates the feeling of isolation in self-employment. People without dependent children are maybe more liable to feel isolated in general.

Work–Life Balance and Satisfaction

Even though work–life balance comes last to the list of advantages of self-employment, this does not mean our respondents are dissatisfied with their work–life balance or with their quality of life in general. They are globally very satisfied with their job and with their work–life balance; self-employment thus appears to have a positive impact on these aspects of quality of life.

All in all, our respondents find more advantages than disadvantages in self-employment in the IT sector. It is not surprising since they stay self-employed while there are plenty of job opportunities on the labour market in the IT sector. Consistent

Table 5 Disadvantages of self-employment

	N	Mean	Std. deviation	Std. error mean
Lack of employment benefits	113	3.8820	1.26375	.11888
Strain	113	3.3133	1.16554	.10964
Isolation	113	2.8186	1.34474	.12650

Paired sample *t*-tests indicate there are significant differences among the three factors.

Table 6 Disadvantages of self-employment—pearson correlations

	Lack of employment benefits	Strain	Isolation
Gender	.077	-.069	.006
Age	.077	.014	.015
Dependent children	-.159	-.090	-.209 ^(a)
Couple	-.132	.043	.015

^a Correlation is significant at the 0.05 level (2-tailed)

^b Correlation is significant at the 0.01 level (2-tailed)

with this finding, more than 90% of our respondents declare they are satisfied with their job and 85% say they are motivated by their job. Unfortunately, we have no precise data to compare this result with job satisfaction of IT corporate professionals. Nevertheless, the results of Finnie and Laporte (2003) give rather strong support to the view that job satisfaction is generally higher amongst the self-employed than for regular paid employees, with this pattern holding at all levels and equally for male and female graduates.

Though work–life balance neither appears as a significant motivation for self-employment nor as a very important advantage, our respondents do not seem to experience strong work–family conflict. Indeed, 80% declare they feel no particular difficulty in balancing their professional and family responsibilities. Furthermore, 78% say they have enough time for their family life. Nearly 70% of our respondents affirm they have enough time for their leisure and social activities. Reciprocally, the strain linked to the family–work interferences is relatively weak. On the other hand, almost one respondent out of four has already refused a contract because of his/her family responsibilities. To conclude, self-employment does not have negative effects on work–life balance, even if work–life balance is not the principal advantage of this form of employment. Furthermore, having dependent children enhances the importance attributed to work–life balance as an advantage of self-employment. It then appears that one can find a satisfying compromise in this form of employment. The favorable labor market may also have an impact on this issue (Cappelli 2001). Indeed, self-employed in the IT sector earn more than corporate professionals, which mean they generally do not have to choose between more income or more temporal flexibility, since both are generally linked to self-employment. Consequently, they do not face the dilemma many self-employed women have to deal with, i.e. to choose between involvement in paid work or in family life (Boden Jr. 1999a, b; Heller Clain 2000). Partly due to the specific situation on the IT labor market, it seems that self-employment provides a satisfying quality of life since it combines good incomes with flexibility, and a large majority of our respondents are satisfied with their job and with their work–life balance.

Conclusion

Consistent with the findings of Moore and Mueller (2002), our research confirms the importance of some “pull” factors, such as financial benefits and flexibility, in the choice of self-employment in the IT sector. Our results indicate that “push” factors,

such as unemployment, have a marginal impact on the choice to become self-employed. IT professionals become self-employed because they want it and not because they have no other option. This finding converges with those of Noorderhaven et al. (2004) and Kirchoff (1996). However, unemployment has an incidence on the choice of self-employment for workers older than 55. This result is particularly interesting in the context of ageing workforce in most industrialized countries. However, our results also emphasises the need to differentiate “pull” factors between them and “push” factors between them, in order to analyse more in depth the complexity of variables leading to self-employment.

While some authors postulate that self-employment is attractive because it facilitates work–life balance (Baines and Gelder 2003; Loscocco 1997), our results show a strong predominance of the financial advantages and a weak impact of factors related to work–life balance. In other words, self-employed IT professionals choose self-employment principally because they get significant financial advantages and an increased control over their work practices. Actually, financial advantages, flexibility and control over work practices are the main incentives leading IT professionals to choose self-employment. In addition, a better income and an increased independence are considered as very important advantages of self-employment. These results are consistent with those of Finnie and Laporte (2003) as well as Blanchflower (2000). Furthermore, the absence of routine is in second position in the list of advantages of self-employment, which tends to support the findings of Peel and Inkson (2004) and Hundley (2001). According to our respondents, the principal disadvantage of self-employment is the lack of employment benefits. Work–life balance does not clearly appear as an important advantage of self-employment in the IT sector. This can be explained by the composition of the population: men in majority. As shown in many studies (Burke et al. 2002; Heilbrunn 2004; Hundley 2001), men are more motivated by income improvement and control on their activities and women by reasons related to work–life balance. Nonetheless, this explanation is not sufficient because no differences were found between the reasons why men and women choose self-employment in the IT sector.

Contrary to other studies (Anthias and Mehta 2003; Boden Jr. 1999a, b; Heller Clain 2000; Holmes et al. 1997; Loscocco 1997), our results do not provide evidence for significant gender differences in self-employment. The importance attached to the various motivations for self-employment, the perceived advantages and drawbacks are the same for men and women. Thus, we are not able to identify masculine or feminine models of self-employment in the IT sector. This may be explained by the homogeneity of our sample and the small number of women. The characteristics of our respondents are very similar. Still, the result is interesting since it contradicts previous work cited above. It may also indicate that younger cohorts in professional sectors do not have masculine or feminine modes of engagement in work, but this remains to be studied in more detail.

In conclusion, work–life balance does not appear as the principal motivation or the principal advantage of self-employment in the IT sector, and this for men as well as for women. However, respondents with family responsibilities value more this advantage than other respondents, which indicates that self-employment does not increase work–family conflict, quite the opposite actually. As Parasumaran and Simmers (2001) mentioned, it seems that one can find a satisfying compromise in

self-employment. Moreover, many studies have demonstrated the negative effect of work–family conflict on job satisfaction and on life satisfaction in general (Demerouti et al. 2005; Greenhaus et al. 2003; Rode et al. 2007). Though work–life balance is not reported by our respondents as the most important advantage of self-employment, it may contribute to improve job and life satisfaction.

It is also important to note the limitations of the current study. The size of the sample and its characteristics (IT sector) do not make it possible to generalize the results to the population of self-employed workers in Canada, but at the same time we wanted to highlight the fact that it is important to study specific professional categories to better understand the motivations for self-employment. Indeed, on average IT self-employed professionals earn more than their salaried counterparts, whereas the opposite situation is observed for self-employed workers in general. This typical feature of the IT sector limits the external validity of our study. Consequently, the fact that some “pull” factors play a bigger role than “push” factors is probably highly linked to the demand of IT professionals on the Canadian labour market. We might have found different results in another sector, for example journalism (D’Amours et al. 2004) or the book publishing sector (Stanworth and Stanworth 1997). This also underlines the heterogeneity of self-employed workers and the influence of professional categories.

An interesting contribution of our research is to highlight the absence of significant differences between men and women. Therefore, future research could investigate more in depth the causes of this phenomenon and the relationship between gender and the socio-professional characteristics of self-employment. The traditional participation of men and women in the professional and family spheres may be neutralized by the fact that self-employed IT professionals are qualified and in high demand on the labour market. On the contrary, it is also possible that women who choose self-employment in the IT sector present professional and personal characteristics more similar to those of men. These are questions to explore in future research.

Appendix 1

Table 7 When you decided to go on your own, what were your motivations?

		Average	Standard deviation
PULL 1	To improve my income	4.4273	0.73521
	Desire to have more flexibility in my working time and organisation	3.7798	1.41000
	Presence of young children	1.0833	1.44122
DISSATISFACTION	Desire to be my own boss	3.2182	1.52882
	Dissatisfaction with my former job	2.6667	1.73020
PUSH	Difficulty to find a job meeting my aspirations	1.9273	1.80066
	Precariousness of former employment	1.6147	1.49634
	Unemployment	1.1273	1.45960
PULL 2	Desire to work with my spouse in the family firm	0.7500	1.06889
	Desire to change career or profession	0.7075	1.14615
	Retired or pre-retired, but do not want to stop working	0.4259	1.02496

Very important=5; Important=4; Moderately important=3; Not very important=2; Not important=1

Appendix 2

Table 8 In your situation of self-employed worker, is it true that you benefit from the following advantages?

		Average	Standard deviation
Financial	Better income	5.4336	0.78917
	Tax benefits	4.5487	1.17254
No routine	Variety of tasks and the challenges	4.8929	1.40371
	Possibility to work more to compensate periods without contracts	3.9107	1.57431
Independence	Independence and freedom (no link with an organization or an employer)	4.8850	1.27302
	Flexibility in working time	4.3805	1.33175
	Autonomy in the way I carry out the job	4.2743	1.40946
	More productive	4.2389	1.37759
Balance	Possibility to telework	3.9027	1.50573
	To balance work and personal activities	3.6549	1.69437
	To balance work and family	3.2478	2.01127

Completely true=6, True=5, Rather true=4; Rather false=3, False=2, Completely false=1

Appendix 3

Table 9 In your situation of self-employed worker, do you experience the following disadvantages?

		Average	Standard deviation
Lack of employment benefits	Absence of welfare benefits	4.1982	1.56565
	No paid holidays	3.9550	1.53379
	Fear to lack contracts or insecurity due to unstable incomes	3.7027	1.36578
Strain	To have to accomplish various administrative tasks	4.5856	1.14787
	Stress	3.4000	1.40901
	Interference of work with personal life	3.0909	1.44340
	To have to work long hours	2.9910	1.38495
Isolation	Work alone, isolation	2.8991	1.49657
	Lack of professional training and sources of information	2.8919	1.42925
	To work simultaneously on more than one contract	2.8559	1.60027

Completely true=6, True=5, Rather true=4; Rather false=3, False=2, Completely false=1

References

- Ang, S., & Slaughter, S. A. (2001). Work outcomes and job design for contract versus permanent information systems professionals on software development teams. *MIS Quarterly*, 25(3), 321–350. doi:10.2307/3250920.

- Anthias, F., & Mehta, N. (2003). The intersection between gender, the family and self-employment: the family as a resource. *International Review of Sociology*, 13(1), 105–116. doi:10.1080/0390670032000087014.
- Baines, S., & Gelder, U. (2003). What is family friendly about the workplace in the home? the case of self-employed parents and their children. *New Technology, Work and Employment*, 18(3), 223–234. doi:10.1111/1468-005X.00123.
- Beaucage, A., Laplante, N., & Légaré, R. (2004). Le passage au travail autonome: choix imposé ou choix qui s'impose. relations industrielles. *Industrial Relations*, 59(2), 345–378.
- Blanchflower, D. G. (2000). Self-employment in OECD countries. *Labour Economics*, 7(5), 471–505. doi:10.1016/S0927-5371(00)00011-7.
- Boden Jr., R. J. (1999a). Flexible working hours, family responsibilities, and female self-employment: gender differences in self-employment selection. *American Journal of Economics and Sociology*, 58(1), 71–83. doi:10.1111/j.1536-7150.1999.tb03285.x.
- Boden Jr., R. J. (1999b). Gender inequality in wage earnings and female self-employment selection. *Journal of Socio-Economics*, 28(3), 351–364. doi:10.1016/S1053-5357(99)00026-8.
- Bradley, D. E., & Roberts, J. A. (2004). Self-employment and job satisfaction: investing the role of self-efficacy, depression and seniority. *Journal of Small Business Management*, 42(1), 37–58. doi:10.1111/j.1540-627X.2004.00096.x.
- Burke, A. E., Fitzroy, F. R., & Nolan, M. A. (2002). Self-employment wealth and job creation: the roles of gender, non-pecuniary motivation and entrepreneurial ability. *Small Business Economics*, 19(3), 255–270. doi:10.1023/A:1019698607772.
- Cappelli, P. (2001). Why is it so hard to find information technology workers? *Organizational Dynamics*, 30(2), 87–99. doi:10.1016/S0090-2616(01)00045-6.
- Christensen, K. E. (1987). Impacts of computer-mediated home based work on women and their families. office. *Technology and People*, 3, 211–230. doi:10.1108/eb022649.
- Curran, J., & Blackburn, R. A. (2001). Older people and the enterprise society: age and self-employment propensities. *Work, Employment and Society*, 15(4), 889–902.
- D'Amours, M., Lesemann, F., Dagenais, L. F., Tremblay, D. -G., & Lévesque, B. (2004). *Le travail indépendant comme combinaison de formes de travail, de sources de revenus et de protections: étude des conditions pour comprendre les rapports entre travail indépendant et protection sociale*. Montréal: INRS-Urbanisation, Culture et Société.
- Delage, B. (2002). *Résultats de l'Enquête sur le travail indépendant au Canada*. Ottawa: Développement des ressources humaines Canada (DRHC).
- Demerouti, E., Bakker, A. B., & Schaufeli, W. B. (2005). Spillover and crossover of exhaustion and life satisfaction among dual-earner parents. *Journal of Vocational Behavior*, 58(1), 266–289. doi:10.1016/j.jvb.2004.07.001.
- Dennis Jr., W. (1996). Self-employment: when nothing else is available? *Journal of Labor Research*, 17(4), 645–661. doi:10.1007/BF02685805.
- DeVaney, S. A., & Kim, H. (2003). Older self-employed workers and planning for the future. *The Journal of Consumer Affairs*, 37(1), 101–120.
- Feldman, D. C., & Bolino, M. C. (2000). Career patterns of self-employed: career motivations and career outcomes. *Journal of Small Business Management*, 38(3), 53–67.
- Felstead, A., & Jewson, N. (2000). *In home, at work, towards an understanding of homeworking*. London: Routledge.
- Finnie, R., & Laporte, C. (2003). Setting up shop: self-employment among Canadian college and university graduates. relations industrielles. *Industrial Relations*, 58(1), 3–32.
- Galt, V., & Moennig, C. (1996). An analysis of self-employment using UK census of population. *International Journal of Entrepreneurial Behaviour and Research*, 2(3), 82–88. doi:10.1108/EUM000000004290.
- Greenhaus, J. H., Collins, K. M., & Shaw, J. D. (2003). The relation between work–family balance and quality of life. *Journal of Vocational Behavior*, 63, 510–531. doi:10.1016/S0001-8791(02)00042-8.
- Heilbrunn, S. (2004). Impact of gender on difficulties faced by entrepreneurs. *International Journal of Entrepreneurship and Innovation*, 5(3), 159–165.
- Heller Clain, S. (2000). Gender differences in full-time self-employment. *Journal of Economics and Business*, 52(1), 499–513. doi:10.1016/S0148-6195(00)00032-1.
- Holmes, S., Smith, S., & Cane, G. (1997). Gender issues in home-based business operation and training: an Australian overview. *Women in Management Review*, 12(2), 68–73. doi:10.1108/09649429710162839.

- Hundley, G. (2001). Why women earn less than men in self-employment. *Journal of Labor Research*, 22(4), 817–829. doi:10.1007/s12122-001-1054-3.
- Kirchoff, B. A. (1996). Self-employment and dynamic capitalism. *Journal of Labor Research*, 17(4), 627–643. doi:10.1007/BF02685804.
- Kunda, G., Barley, S. R., & Evans, J. A. (2002). Why do contractors contract? the experience of highly skilled technical professionals in a contingent labour market. *Industrial and Labor Review*, 55(2), 234–261.
- Levesque, M., Shepherd, D. A., & Douglas, E. J. (2002). Employment or self-employment: a dynamic utility maximizing model. *Journal of Business Venturing*, 17(3), 189–210. doi:10.1016/S0883-9026(00)00063-X.
- Loscocco, K. A. (1997). Work–family linkages among self-employed women and men. *Journal of Vocational Behavior*, 50(2), 204–226. doi:10.1006/jvbe.1996.1576.
- Montgomery, M., Johnson, T., & Faisal, S. (2005). What kind of capital do you need to start a business: financial or human? *The Quarterly Review of Economics and Finance*, 45, 103–122. doi:10.1016/j.qref.2003.11.005.
- Moore, C. S., & Mueller, R. E. (2002). The transition from paid to self-employment in Canada: the importance of push factors. *Applied Economics*, 34(6), 791–801. doi:10.1080/00036840110058473.
- Netemeyer, R. G., Boles, J. S., & McMurrian, R. (1996). Development and validation of work–family conflict and family–work conflict scales. *The Journal of Applied Psychology*, 81, 400–410. doi:10.1037/0021-9010.81.4.400.
- Noorderhaven, N. G., Thurik, A. R., Wennekers, A. R. M., & van Stel, A. J. (2004). The role of dissatisfaction and per capita income in explaining self-employment across 15 European Countries. *Entrepreneurship Theory and Practice*, 28(5), 447–466. doi:10.1111/j.1540-6520.2004.00057.x.
- Organisation de coopération et de développement économiques (OCDE). (2003). Statistiques trimestrielles de la population active (3), 1–206.
- Parasuraman, S., & Simmers, C. (2001). Type of employment, work–family conflict and well-being: a comparative study. *Journal of Organizational Behavior*, 22(5), 551–568. doi:10.1002/job.102.
- Parslow, R. A., Jorm, A. F., Christensen, H., Rodgers, B., Strazdins, L., & D'Souza, R. M. (2004). The associations between work stress and mental health: a comparison of organizationally employed and self-employed workers. *Work and Stress*, 18(3), 231–244. doi:10.1080/14749730412331318649.
- Peel, S., & Inkson, K. (2004). Contracting and careers: choosing between self and organizational employment. *Career Development International*, 9(6), 542–558. doi:10.1108/13620430410559142.
- Rode, J. C., Rehg, M. T., Near, J. P., & Underhill, J. R. (2007). The effect of work/family conflict on intention to quit: the mediating roles of job and life satisfaction. *Applied Research in Quality of Life*, 2, 65–82. doi:10.1007/s11482-007-9030-6.
- Royal Bank of Canada. (2005). Les femmes entrepreneures sont souvent moins motivées par l'argent que par des priorités personnelles. Retrieved November, 23, 2005, from <<http://www.rbc.com/nouvelles/20051123sme.html>>
- Singh, G., & Verma, A. (2003). Work history and later life labor force participation: evidence from a large telecommunications firm. *Industrial & Labor Relations Review*, 56(4), 699–715. doi:10.2307/3590964.
- Stanworth, C., & Stanworth, J. (1997). Managing an externalised workforce: freelance labour-use in the UK book publishing industry. *Industrial Relations Journal*, 28(10), 43–55. doi:10.1111/1468-2338.00040.
- Tal, B. (2008). An island of stability. Canadian employment quality index, CIBC world markets.
- Tremblay, D. -G. (2003). Telework: a new mode of gendered segmentation? results from a study in Canada. *Canadian Journal of Communication*, 28(4), 461–478.
- Tremblay, D. -G., Chevrier, C., & Di Loreto, M. (2007a). Le travail autonome: une meilleure conciliation entre vie personnelle et vie professionnelle...ou une plus grande interpénétration des temps sociaux? *Leisure and Society*, 29(1), 191–214.
- Tremblay, D. -G., Najem, E., & Paquet, R. (2007b). Le travail et le vieillissement; vers une nouvelle articulation des temps sociaux tout au long du parcours de vie. In D. -G. Tremblay (Ed.), *D'une culture de la retraite à un nouveau management des âges et des temps sociaux* pp. 65–82. Québec: Presses de l'université du Québec.