

エディトリアル

日本の労働市場における賃金変動の変質と労働供給制約

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日本の労働市場には近年、大きな変化が起こっている。企業収益が上昇し、労働需給がひっ迫するようになって、かつてのように賃金が増えなくなった。そしてその一方で、非正規労働者が増えるとともに、賃金格差の拡大が見られる。さらにはいくつかの業種で人手不足が深刻になっているにもかかわらず、そこへの転職者の増加はあまり見られない。はたして、こうした労働市場の構造的変調は、今なぜ起こっているのか。

さらに少子高齢化が進展し、生産年齢人口が大きく減少するようになった現在、女性や高齢者の労働供給の拡大が期待されており、確かに近年、こうした人々の労働力化が進展してきている。だが、それをさらに伸ばし、質的にも向上させていくには、能力開発や継続雇用の促進が期待されるが、それを阻んでいる要因として、子どもの出産や介護に伴う離職が挙げられる。こうした問題を解消するために、保育所の整備や育児休業制度の普及、介護サービスの提供拡大等の施策の拡充が期待されるが、はたしてこれらの施策は、いま、効果を上げているのだろうか。上げてないとすれば、どこに問題があるのか。

本特集は大きく分けて2部から構成される。労働市場における賃金変動の変質に焦点を当てた第Ⅰ部（第1章から第3章）と、労働の質の向上、出産後の女性の就業行動と中高年齢層の就業行動における諸施策の効果に焦点を当てた第Ⅱ部（第4章から第8章）である。以下、各章における分析結果について要約する。

第1章「日本の二部料金的賃金設定ルール—名目賃金上昇の条件」では、日本の賃金設定は、マクロの労働市場変数に大きく影響される一方、横並びの特性を示す定期賃金と、個別企業の経営状態等から強く影響されるボーナスの二部料金制度になっており、これを想定したモデルを、98年以前と以後の二つの期間に分け推定を行う。労使交渉で重視される失業率などの労働市場要因、インフレ率、企業収益などの支払い要因を説明変数に加え、推計すると、98年以前の定期賃金は労働市場指標に敏感だったが、98年以降は企業内部の労働保蔵の状況に影響されるようになった。さらにボーナスは、98年以前は利潤要因が重要だったが、98年以降、悪化した外部労働市場指標にも敏感になり、家計に移転されていたレントシェアリングの分が消えてなくなっている。このことが近年の賃金停滞の最大要因として挙げられる。失業等の労働市場指標を重視するよりも、時間当たりの生産性を重視した推定式が有効になってきており、賃上げのマクロ指標として、人員ベースではなく、時間当たり指標を重視していく必要があることが示唆される。

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第2章「景気変動が賃金格差に与える影響」は、賃金格差が景気回復時に拡大する「循環的動き」を示すのか、逆に景気後退期に賃金格差が拡大する「反循環的動き」を示すのかを検証する。厚生労働省の月次データである「毎月勤労統計」と年次データである「賃金構造基本統計調査」により、一般労働者とパートタイム労働者の賃金比率を取ると、前者が循環的動きを示すのに対し、後者は反循環的動きを示す。「賃金構造基本統計調査」が年次ベースのデータであり、時間集計バイアスの発生している可能性があるため、ここでは「毎月勤労統計」の結果を取って、賃金格差は「循環的動き」を示すと結論付ける。特にこの章では、日本の労働市場のファクトと整合的になるようにカリブレートする。2セクターからなる労働市場を前提とした確率的サーチ・マッチングモデルにオン・ザ・ジョブ・サーチを導入することでパートタイム労働者から一般労働者への転職を可能にしたモデルを採用し、シミュレーションを行ってみると、一般労働者とパートタイム労働者の賃金格差は「循環的」な動きを示し、景気回復時に賃金格差は拡大し、景気後退期に格差は縮小することが示される。

第3章「付加価値生産性と部門間労働配分」は、日本において部門間労働再配分が需要の減っている部門から増えている部門にどの程度スムーズに行われてきたかを検証する。需要が大きく拡大している社会福祉などの多くが政府によって規制を受けており、部門間の賃金調整が伸縮的に行われなかったために、これらの部門へ労働再配分が行われていないのではないかといった疑問に立って、都道府県別・職業別の有効求人倍率のダイナミクスを手掛かりに検証を行う。この問題を理論的に考察するため、部門外との労働移動を考慮したサーチモデルを展開すると、賃金が伸縮的に決定される場合には部門外の労働需給の変動が当該部門の労働需給ひっ迫度に長期的に波及することが示される。一方、部門内の賃金が硬直的な場合には、長期的にもそのような波及経路は遮断される。都道府県別・職業別有効求人倍率の月次データを活用した実証分析では、長期制約・短期制約を組み合わせたベクトル自己回帰モデルの推定を通じ、労働需給ひっ迫度への反応を求めると、販売や事務といった伝統型職業では全国的労働市場から個別市場への波及が起きていること、それに対し、社会福祉、看護、家庭生活支援といった成長型職業ではそうした波及からの隔離が発生していることが示される。以上の結果は、現代日本で今後成長が期待される分野で、労働再配分機能に阻害要因が存在する可能性を示唆している。

第4章「持続的成長に向けての人的資本政策の役割」は、少子高齢化が進展する中、持続的成長を維持していくためには、一人ひとりの生産性を向上させるための人的資本形成が重要であるとして、これに関する政策の役割について検証を行っている。人的資本の蓄積は人生を通じて行われるもので、ライフサイクルの初期の段階における人的資本形成がのちの人的資本蓄積に影響を与える。こうしたことを考慮に入れ、ライフサイクルの様々な段階において人的資本蓄積機会の不平等は、主に家庭環境の違いに起因するが、教育政策においても無視できない影響を与えており、その後の所得の不平等をももたらす。幼児期における人的資本形成の支援の重要性を強調する。

第5章、第6章は子ども出産後の母親の就業について分析した章である。第5章は保育所整備、第6章は育児休業給付金の増額が女性の就業率引き上げをもたらしたかを検証する。第5章の「保育所整備と母親の就業率」は、価値観や就業意欲といった観測されない要因の影響を避けるために、都道府県間比較ではなく、都道府県内の変化に着目し、1990年から2010年までの国勢調査の公表数値を用いて、保育所定員率の変化が母親の就業率の変化に与える影響を考察した結果、平均的には保育所定員率の上昇は母親の就業率に影響を与えていないことがわかった。これは保育所の整備が進むと、三世帯同居で見られる祖父母による保育が、保育所による保育に置き換わったためであると考えられる。しかし三世帯同居世帯が大きく減少した今、保育所の整備は祖父母による保育を代替し続けるとは考えにくく、母親の就業率を上昇させる有力な手段である可能性は高いが、その効果を考察する上では私的保育手段との代替関係があることを明確に意識すべきであることが強調される。

第6章「育児休業給付金と女性の就業」は、育児休業給付金が2001年に引き上げられたが、その前後における出産した女性の就業継続率を比較することによって、その効果を検証する。雇用保険から給付される育児給付金の支給は1995年に開始され、基本給給付金と職場復帰給付金を合わせ、出産前平均賃金の25%が支給されるようになった。この給付金は2001年に、出産前賃金の40%が支払われるように引き上げられた。こうした変更に合わせて、出産の時期を遅らせることは困難なため、制度変更は母親の就業に対して外生であると見なせ、政策効果を推定することができる。制度改正前に出産した女性を対照群、改正後に出産した女性を処置群とし、「就業構造基本調査」を用いて両者を比較した結果、育児給付金が母親の就業継続を押し上げたという証拠は得られず、育児休業後の子育てと就労の両立の難しさが、改めて確認された。

第7章「中高年の就業意欲と実際の就業状況の決定要因に関する分析」は、高齢者の就業意欲、および実際の継続就業に与える要因について、厚生労働省「中高年者縦断調査」を用いて検証する。分析の結果、中高年齢層の就業意欲は専門的な職業従事者において強く、高齢者になっても就業を続けたいと考える人は多い一方、同一企業で20年以上勤めている人、大企業で勤めている人の就業意欲は低くなることがわかった。持ち家、住宅ローン、預貯金の効果をも考慮に入れ分析すると、年金を含めた老後の生活費確保が難しいほど就業意欲は強い。就業意欲はその後の実際の就業継続に強く影響し、「可能な限り仕事をしたい」と考えている人の継続就業率は、「仕事をしたくない」と考えている人の約2倍高くなる効果があり、過去の就業状態や持ち家、住宅ローン、預貯金が同じであったとしても、強く残る。就業意欲を持ちながら離職している人の多くは、健康が悪化し離職している。以上のことから、年齢が高まっても就業を続けたいと考える人を増やすには、金銭的理由とともに、若いうちから専門性を意識するようしていく必要がある。

第8章「要介護の親と中高年齢者の労働供給制約・収入減少」は、家族介護による就業抑制、労働時間や本人収入の減少について、厚生労働省「中高年者縦断調査」を用いて、分

析をする。ここでは特に、家族介護の提供と就業の同時決定、および家族介護の提供と家族介護を受ける要介護者との同居の同時決定を考慮し、これらの二つの内生性に配慮した分析を行った。その結果、若いコーホートほど、家族介護を行っている割合は高まっており、1946年生まれに比べ1954年生まれの男性では6%家族介護を行う割合が高く、女性では8%高いことがわかった。また二つの内生性を考慮してもなお、親の要介護期間が1年延びると、就業確率は男女とも1%低下する。就業を続けている人の就業時間や日数を見ると、親の要介護の発生や実際の家族介護の提供は就業時間を有意に短縮させておらず、現在のところ、就業時間の調整は難しく、実態は家族介護をして仕事を辞めるか、家族介護をせずに仕事を続けるかの二者択一の状態になっている。親の家族介護を担っている人の収入は男女とも6~8%下がっている。親の要介護の発生は、親との同居開始の契機であり、同時決定なっていることが示される。介護が長期的な労働供給制約をもたらすことを勘案すると、介護休業制度の拡充以上に、長時間労働の是正や介護サービスの拡充など、家族介護と仕事の両立を可能にする社会政策が重要であり、家族介護を担っている人々の高齢期の貧困リスクの引き下げにもつながる。

人口減少や少子高齢化の進展に伴う労働供給制約の強まりは、企業における働き方の改革と、保育・介護などの拡充による仕事と生活の両立支援策を求める。

Editorial

Wage Structure Change and Labor Supply Constraints in Japan's Labor Market

Special Editor Yoshio HIGUCHI

Japan's labor market has undergone substantial changes in recent years. Even though firms' profits have increased and labor supply has become tight, wages have not risen the way they used to in the past. One reason is that, along with an increase in non-regular employment, wage inequality has been on the rise. Furthermore, even though severe labor shortages are appearing in some industries, there has been hardly any increase in the movement of labor into these industries. These developments raise the question why such structural changes in Japan's labor market are currently taking place.

What is more, with the aging and shrinking of the population and the substantial decline in the working-age population, it is expected that labor force participation of women and the elderly will increase, as has, in fact, already started to happen in recent years. However, to further increase the labor supply of women and the elderly both quantitatively as well qualitatively, it will be necessary to promote the development of skills and steady employment, given that women, for example, often are forced to leave their job following childbirth or to care for an elderly parents. It is widely argued that in order to address these challenges, Japan will have to expand policies such as the provision of nursery places and childcare leave as well as care services for the elderly. However, the question is whether such policies in practice have the desired effects and, if this is not the case, why.

This special volume, which seeks to address these issues, falls into two major parts. Part I focuses on wage developments in the labor market (Chapters 1 to 3), while Part II examines the effects of various policies on labor quality, the employment behavior of women after giving birth, and the employment behavior of the middle-aged and elderly (Chapters 4 to 8). The following is a brief summary of the findings of each of the chapters.

Chapter 1, titled "Two-Part Wage rule in Japan: Conditions for nominal wage increases," focuses on the fact that in Japan, wages consist of two parts: a fixed regular wage which is greatly affected by macroeconomic labor market conditions and generally changes in a similar manner across firms, and bonuses, which greatly depend on the business performance of individual firms. Based on a model incorporating this two-part wage system, the chapter empirically examines developments in

the two parts before and after 1998. Using labor market factors on which the annual wage negotiations between management and labor (*shunto*) focus, such as the unemployment rate, as well as the inflation rate and firms' profits as explanatory variables, the analysis shows that whereas before 1998 fixed wages were sensitive to labor market indicators, from 1998 onward, labor hoarding within firms became an important factor. Meanwhile, with regard to bonuses, the analysis indicates that while before 1998, firms' profits were an important determinant, from 1998 onward bonuses also became susceptible to external labor market indicators, which had deteriorated, so that rent sharing with workers diminished. This can be regarded as the main reason for the stagnation in wages in recent years. The finding of the analysis, that estimation equations focusing on hourly productivity rather than labor market indicators such as unemployment are more explainable, suggest that macro indicators of wages should focus on hourly wages and not on wages per person.

Chapter 2, titled “Business Cycle and Wage Dispersion,” examines whether wage differentials in Japan are procyclical – that is, whether they increase during times of economic recovery – or whether, conversely, they are countercyclical and expand during periods of recession. Using the monthly data of the *Monthly Labour Survey* and the annual data of the *Basic Survey on Wage Structure*, both published by the Ministry of Health, Labour and Welfare, to calculate the ratio of regular workers' wages to part-time workers' wages, the authors find that the former data indicate that wage differentials are procyclical, while the latter suggest that they are countercyclical. However, because the *Basic Survey on Wage Structure* consists of annual data and therefore potentially suffers from aggregation bias, the authors take the results from *Monthly Labour Survey* and conclude that wage differentials in Japan are procyclical. Based on this, the authors construct a search and matching model with a two-sector labor market consisting of full-time and part-time workers, and then calibrate the model using Japanese labor market data. The model incorporates on-the-job search activity allowing part-time workers to move to the full-time job sector with a certain probability. The authors find that the model replicates the cyclical fluctuations in the wage differentials between full-time and part-time workers and that, during times of economic recovery, wage differentials increase, while they decrease during recessions.

Chapter 3, titled “Value Added Productivity and Intersectoral Labor Allocation,” examines to what extent labor is efficiently reallocated from sectors with declining demand to sectors with increasing demand. There are concerns in Japan that because many of the sectors facing a large increase in demand, such as social welfare services, are heavily regulated by the government and wages do not flexibly adjust across sectors, labor may not be efficiently reallocated to these sectors. To investigate this issue, the chapter focuses on the dynamics of prefecture- and occupation-level effective job-offers-to-applicants ratios. Specifically, the author develops a search model taking

labor flows into and out of a hypothetical sector into account and shows that if wages are flexible, changes in labor supply and demand outside the sector affect labor market tightness in the sector in the long term. On the other hand, if wages in the sector are rigid, such kind of transmission mechanism is impeded even in the long term. In the empirical analysis, using monthly data of the effective job-offers-to-applicants ratio by prefecture and occupation, the author then estimates a vector autoregression model that combines long-term and short-term constraints to examine the response to a tightening in labor market conditions. The results indicate that in traditional occupations such as sales and clerical occupations, a tightening in the national labor market is transmitted to individual labor markets, but in growth occupations such as welfare, nursing, and home-life support, no such transmission to individual labor markets takes places. These findings suggest that areas that are expected to grow in the future may be characterized by impediments to the efficient reallocation of labor.

Against the background of Japan's demographics, Chapter 4, titled "The Role of Human Capital Policy to Achieve Sustainable Growth," highlights the importance of human capital formation in raising per capita productivity in order to achieve sustainable growth, and examines the role of policies in this direction. The authors point out that individuals accumulate human capital throughout their lifetime and that human capital formation in the early stages of life affect human capital accumulation in later stages. Taking this into consideration, it is argued that while inequality in opportunities for human capital accumulation throughout the various stages of individuals' lifecycle are largely determined by differences in the family environment, the impact of education policy cannot be ignored and can give rise to later income inequality. These considerations highlight the importance of support for human capital formation in early childhood.

Chapters 5 and 6 examine the employment of mothers after childbirth. Chapter 5 investigates whether the provision of nursery schools and Chapter 6 whether the increase in child care leave benefits have led to a rise in the employment rate among women. Chapter 5, titled "The Provision of Nursery Schools and the Employment Rate of Mothers," considers the impact of changes in nursery school capacity on the employment rate of mothers. In order to eliminate the effects of unobservables such as individuals' value system and work motivation, the analysis focuses on changes within prefectures, using figures published in the *Population Census* from 1990 to 2010. The results indicate that, on average, an increase in the provision of nursery school places did not have an effect on mothers' employment rate. The authors argue that the likely reason is that the increased provision of nursery school places has simply replaced childcare by grandparents in three-generation households. However, with three-generation households having greatly declined today, it is unlikely that the provision of nursery school places will continue to substitute for child-

care by grandparents, so that the provision of nursery school places should be an effective means of raising employment among mothers. That being said, the findings also highlight that when considering the effects of the provision of nursery school places, it is important to keep in mind that there is a substitutive relationship with private childcare arrangements.

Chapter 6, titled “Childcare Leave Benefits and Female Employment,” investigates the effects of the increase in childcare leave benefits in 2001 by comparing the rate of women who continued to work after childbirth before and after the increase in benefits. Childcare leave benefits, which are paid from unemployment insurance, were launched in 1995, and basic childcare leave benefits and work resumption benefits together initially amounted to 25% of the average wage a woman earned before giving birth. In 2001, these benefits were raised to a combined 40% of the wage before giving birth. Since it is unlikely that women will have delayed giving birth to take advantage of the increase, the increase in benefits can be regarded as exogenous to mothers’ employment, so that it is possible to estimate the effects of the policy. Using data from the *Employment Status Survey* and dividing women into those who gave birth before and those who gave birth after the change, the authors find no evidence that the increase in childcare leave benefits led to a significant increase in the rate of women who continued to work after childbirth, confirming once again that it is difficult for women to combine childcare and work.

Chapter 7, titled “The Desire to Work of the Middle-aged and Elderly and Determinants of Their Employment Status,” examines middle-aged and elderly individuals’ desire to work and the factors affecting whether they actually continue to do so, using the Ministry of Health and Welfare’s *Longitudinal Survey of Middle-aged and Elderly Persons*. The analysis shows that among those engaged in a professional occupation show a strong desire to work and many continue to do so even at an advanced age, while those who have been employed at the same company for more than 20 years and/or those working at a large firm show a lower desire to continue to work. Additional analyses taking the effects of home-ownership, whether someone has a housing loan, and savings into account indicate that the more difficult it is for individuals to cover their living expenses in old age through pensions and other means, the stronger is the desire to work. The desire to work has a strong effect on whether individuals carry on working in practice: the percentage of individuals continuing to work is twice as high for those saying they “want to work as long as possible” as for those saying they do not want to carry on working. Moreover, the effect remains strong even when controlling for the past employment status, home-ownership, the presence of a housing loan, and savings. Meanwhile, many of those giving up work despite wanting to work do so for health reasons. These findings suggest that, in order to increase the number of people who want to continue to work when they get older, what matters in addition to financial incentives, is to raise awareness

of the importance of specialization from a young age.

Chapter 8, titled “Labor Supply and Income Reduction of Middle- and Old-Aged People in Japan with a Parent in Need of Long-Term Care,” examines the employment constraints imposed by having to provide long-term care for a family member and the decline in working hours and income of those providing such care, using the Ministry of Health and Welfare’s *Longitudinal Survey of Middle-aged and Elderly Persons*. In particular, the analysis considers the simultaneous determination for the provision of care for a family member and employment as well as the simultaneous determination for the provision of care for a family member and co-residence with the family member receiving care, taking the resulting endogeneity into account. The results indicate that the younger the cohort, the higher is the share of individual providing care for a family member; for instance, among those born in 1954, the share among men providing care for a family member is 6 percentage points higher than among those born in 1946, while the equivalent figure for women is 8 percentage points. Further, taking the endogeneity between caregiving and employment into account, the analysis suggests that a one-year increase in the length of providing care for a parent both for men and women is associated with a 1 percentage point decrease in the probability that they are employed. Looking at the working hours and number of working days of those that do continue to work, neither starting to provide care nor caring for an elderly parent is associated with a significant decrease in working hours, reflecting the fact that in Japan it continues to be difficult to adjust working hours, so that in practice individuals have to choose between the two alternatives of providing care and quitting their job or providing no care and continuing to work. Meanwhile, for both men and women, the income of those shouldering the caregiving for a parent falls by 6-8%. The analysis further shows that starting to care for a parent often coincides with starting co-residence with the parent, so that the two are simultaneously determined. Taking into consideration that, in the longer term, caregiving will further intensify labor supply constraints in Japan, the findings of the chapter indicate that – in addition to an expansion of the family care leave system – social policies to make it possible to combine family care and work through measures to address long working hours and to expand nursing care services are needed, as well as policies to reduce the risk of poverty in old age for those caring for elderly family members.

Taken together, the various chapter highlight that the growing labor supply constraints due to the continuing decline and aging of the population mean that firms will have to change the way they operate and will require support measures – such as expansion of childcare and care for the elderly – to make it easier to combine work and life.