

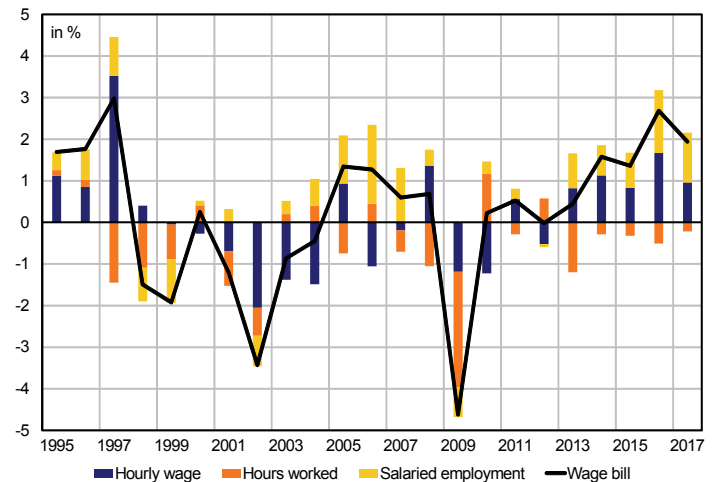
Trésor-economics

No. 220 • April 2018

Is higher wage growth on the horizon in Japan?

- After the 1997 economic crisis, Japanese companies were burdened by high levels of debt. They attempted to deleverage by lowering their wage bill, through both job cuts and wage restraint. Japan's unemployment rate, which had been below 3.5% until 1997, then rose significantly to peak at 5.5% in June 2002. Average per capita wages declined by 0.7% p.a. between 1998 and 2013, keeping Japan in deflation in the 2000s.
- The development of more flexible forms of work (short-term contracts, part-time jobs, etc.) contributed to the wage restraint; such jobs are generally paid less, putting a damper on average per capita wages. The pay of full-time employees also declined - its variable part, in particular, with fixed pay following suit later on.
- Until 2012, the wage slowdown was fuelled by the fact that the Bank of Japan (BoJ) had no explicit inflation target to anchor expectations. As a result, wage negotiations focused strongly on past inflation. Thus, between 2002 and 2013, wage negotiations resulted in a reduction in the fixed portion of full-time employees' total pay.
- A first turning point came in late 2012, after the newly-elected Abe government implemented "Abenomics", its highly accommodative economic policy. Hourly wages have returned to a positive trend since 2013, and average per capita wages since 2014. Nevertheless, the wage trend since 2013 has not been strong enough to bring inflation up to the 2% target set by the BoJ in 2013.
- However, wages could accelerate further by 2020 thanks to improvements along the economic cycle, strong pressures in the employment market (accentuated by a shrinking population) and tax incentives for raising wages. This wage acceleration could, in turn, buoy inflation.

Trend in Japanese wages



Source: Cabinet Office (all workers). DG Trésor calculations.

1. Over the past 20 years, more flexible forms of work have developed to the detriment of the full-time permanent employment model - with a negative impact on wages

In 1998, the Japanese economy dipped into recession due to a convergence of factors: a 2-point VAT hike in April 1997, the Asian financial crisis in July 1997 and the ensuing Japanese financial crisis in November of that year. Japan's unemployment rate rose, peaking at 5.5% in June 2002 – its highest level ever. While this figure may seem low, it is not directly comparable to the unemployment rates of other OECD countries due to a flexion effect (with fluctuations in the labour force participation rate due to changes in the economic context) that is much higher for the Japanese working population during crisis periods, and actually conceals a higher unemployment rate.¹

Beginning in 1998, against this poor economic background, Japanese firms implemented policies aimed at deleveraging and becoming more competitive. These policies resulted not only in job cuts, but also in wage restraint and a search for greater wage flexibility. Successive labour market reforms boosted flexibility by making it easier for firms to use short-term contracts and temporary staff. These trends helped push the Japanese economy into deflation in 1999.

1.1 Average wages were affected by the development of more flexible forms of work

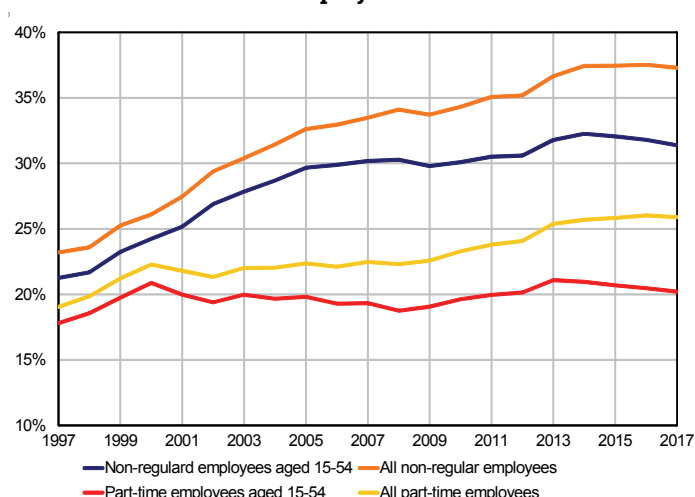
In seeking more flexibility for jobs and wages, Japanese firms strayed somewhat from the full-time permanent

employment model – rooted in "jobs for life" and seniority-based pay scales – and gave greater emphasis to more flexible forms of work (which are generally paid less). Thus, part-time employment, as a proportion of total employment, rose by 7 percentage points between 1997 and 2016 to represent 26% of all employees, according to Japan's Labour Force Survey. More broadly, atypical forms of work (e.g. part-time, short-term and temping) rose by 14 percentage points to represent 38% of all employees in 2016.

(i) Substantial increase in part-time work

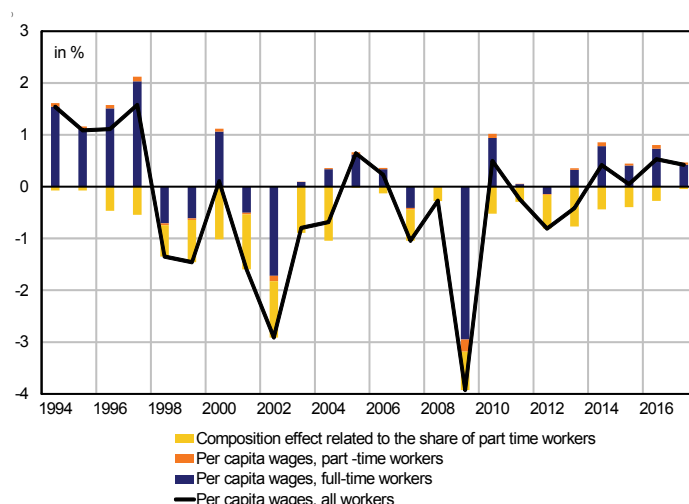
The increase in the portion of part-time employment has dampened the average per capita wage trend due to a composition effect. Thus, the 0.7% p.a. decline in per capita average wages over 1997-2016 is mainly attributable to the rise in part-time employment, which had a -0.6% p.a. effect on average per capita wages over that period (see Charts 1 and 2). Moreover, the increase in part-time employment weighed on the average number of hours worked per worker, which declined by 8% between 1997 and 2016, even though the total number of hours worked in the Japanese economy was down just 1% thanks to strong job market momentum after 2002.

Chart 1: Non-regular employment as a percentage of salaried employment



Sources: Ministry of Internal Affairs and Communications (MIC), Labour Force Survey. DG Trésor calculations.

Chart 2: Average per capita wage trend by component



Sources: Ministry of Health, Labour and Welfare (MHLW), Monthly Labour Survey (p). DG Trésor calculations.

(1) See A. Fortin and M. Sicsic (2009), "Japan's changing labour market and how it is affecting its growth model", *Trésor-Economics* no. 65.

(ii) *Wages of full-time workers have been affected by demographics and by the development of short-term full-time contracts*

To round out the pension reforms passed in 1994 and 2000, which gradually raised the retirement age for basic and complementary pensions to 65 years between 2001 and 2025, Japanese lawmakers passed a law in 2004 to encourage companies to keep employees on their payrolls past age 60. These incentives came into effect in the 2006 fiscal year. To do so, companies could raise the mandatory retirement age (previously often set at 60) to 65, eliminate the mandatory retirement age altogether, or negotiate with labour unions to propose a system for keeping older workers in their jobs. According to a 2008 survey by the Ministry of Health, Labour and Welfare², the majority of firms have opted for the third possibility, whereby a firm must keep all its employees aged 60 who wish to continue working. This generally entails drawing up a rider to the work contract or signing a new work contract (often for a fixed term). In both cases, working conditions are different from the initial contract. The employer can offer a lower salary than the employee earned prior to entering this scheme; this occurs in nearly 80% of cases. As a result, the average wage of full-time employees declines sharply after age 60 (see Chart 3). This decline, together with the ageing of the population, impacts overall average wages due to a composition effect.

In addition to this demographic effect on wages, there is also a structure effect linked to the development of short-term contracts. According to the Basic Survey on Wage Structure, full-time workers on short-term contracts generally earn lower wages than those on permanent contracts (see Chart 3). The development of such short-term contracts thus also has a negative effect on the average wages of full-time workers as a whole.

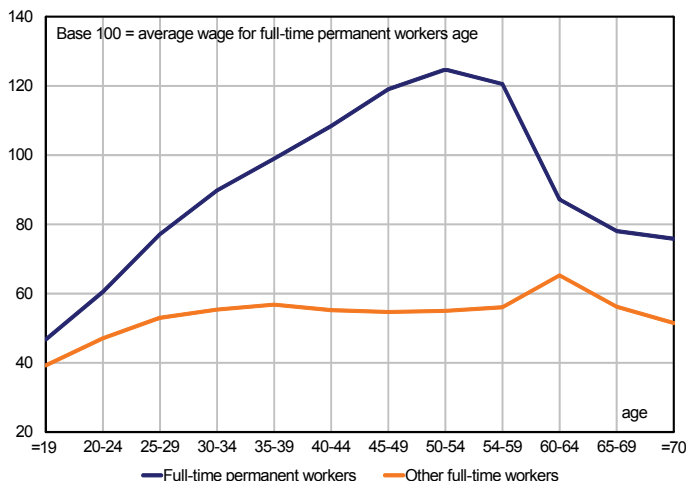
1.2 Wage restraint affected all full-time workers

The average wages of full-time workers have declined, as well. In addition to the structure effects linked to more flexible employment and the ageing population (see above), the decline in the average wage of full-time workers between 1997 and 2013 was the result of several trends and reflected strong wage restraint behaviour by firms.

(i) *The variable component of pay has been revised downward*

As a response to the economic crisis, the variable component of pay (i.e. bonuses generally paid out in the summer and winter, which account for around 20% of total pay, or 25% if overtime pay is included) has been an adjustment variable for the wage bill for full-time employees. Furthermore, when the economy improves, companies prefer to pay bonuses rather than give pay rises, which are seen as a fixed cost (see Chart 4).

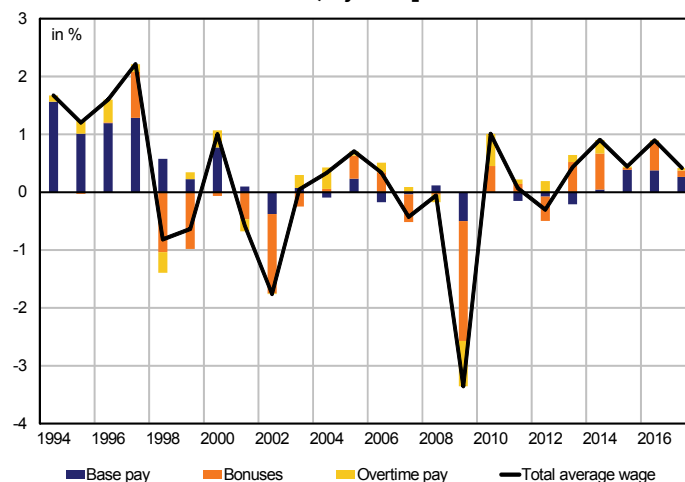
Chart 3: Wage gaps for full-time workers in 2016



Source: MHLW, Basic Survey on Wage Structure (private-sector firms with more than 10 employees). DG Trésor calculations.

How to read this chart: The blue line shows average wages for full-time workers on permanent contracts, by age bracket. The orange line shows average wages for full-time workers on other kinds of contracts, also by age bracket. The wage gap between these two categories of full-time workers widens between age 25 and age 60, then narrows due to a clear decline in the pay of full-time permanent workers aged 60 and older.

Chart 4: Trend in per capita average wages for full-time workers, by component



Source: MHLW, Monthly Labour Survey (private-sector firms with more than 5 employees). DG Trésor calculations.

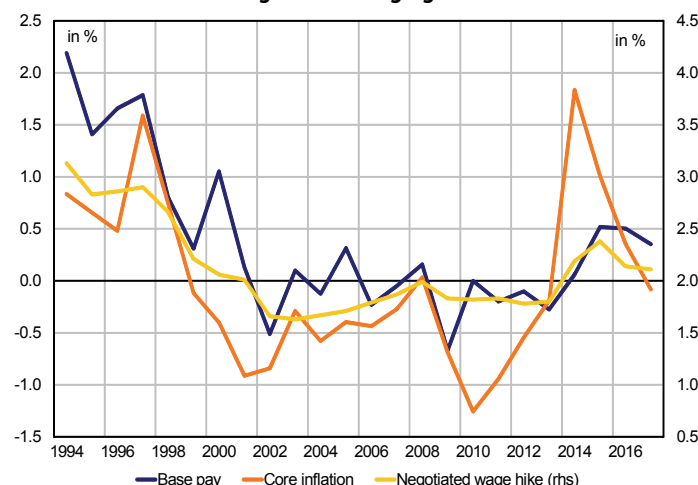
(2) There were certain exceptions but these were eliminated during the 2013 reform of this scheme.

(ii) *In a deflationary context, the weak anchoring of inflation expectations weighed on the base pay scale*

According to the BoJ,³ Japanese wages appear to be more sensitive to past inflation and less sensitive to inflation expectations. The fact that the BoJ did not have an explicit inflation target until 2012, along with the importance given to past inflation in the wage negotiation process, may explain this atypical wage formation phenomenon.⁴ Given these circumstances, weaker inflation or even deflation - as observed in Japan in the late 1990s – can have an enduring negative impact on wage growth and inflation.

The spring wage negotiations (which in Japan are commonly called "shunto", literally, "spring offensive") mainly apply to the full-time workers of major firms. However, these negotiations set a benchmark for the entire economy. Labour unions negotiate changes to the base pay scale, i.e. the fixed portion of pay (excluding bonuses and overtime pay), as well as seniority-based automatic wage hikes,⁵ by referring to the economic context and past inflation (Rengo, Japan's largest labour union, notes that past inflation is a key factor in wage negotiations). The figure announced following these negotiations corresponds to the cumulative change to the base pay scale and seniority-based pay. Below a threshold of around 2% (i.e. the customary seniority-based automatic wage hike), base pay is no longer rising. Thus, given the economic crisis and the decline in inflation, negotiated wage gains slipped below the 2% threshold between 2002 and 2013, signalling flat or even falling base pay for full-time workers (see Chart 5).

Chart 5: Trends in per capita full-time base pay, inflation and negotiated wage gains



Sources: MHLW, Monthly Labour Survey (private-sector firms with more than 5 employees). DG Trésor calculations.

How to read this chart: The peaks in core inflation in 1997 and 2014 correspond to the VAT hikes of 2 and 3 percentage points, respectively, that took effect on 1 April of those years.

Other factors affected the base pay trend in the 2000s, including notably the situation of SMEs, which were generally hit harder by the crisis than the largest firms. As such, SMEs had less wherewithal to give wage hikes in the 2000s as their financial situation remained poor following the crises of the 1990s. In addition, the low mobility of full-time workers may explain a portion of the weak wage trend during periods of economic recovery (see Box 1). Lastly, regional minimum wage hikes slowed on average after 1999, further dampening the base pay trend.

(3) Ko Munakata and Masato Higashi (2016), "What Determines the Base Salary of Full-time/Part-time Workers? *Bank of Japan Review*.

(4) According to the BoJ, inflation expectations play a much larger role in wage formation in other advanced economies.

(5) Wages and pay rises for seniority are set at company level. Firms generally give a 2% average pay rise each year, but they can freeze these rises.

Box 1 : Two job markets with different wage trends

Hourly wage trends are different for part-time and full-time workers. Wages for full-time workers are less closely correlated to the current situation of the economy and the job market. Conversely, hourly wages for part-time workers are more reactive to pressure on the job market and minimum wage hikes (see Chart 6).

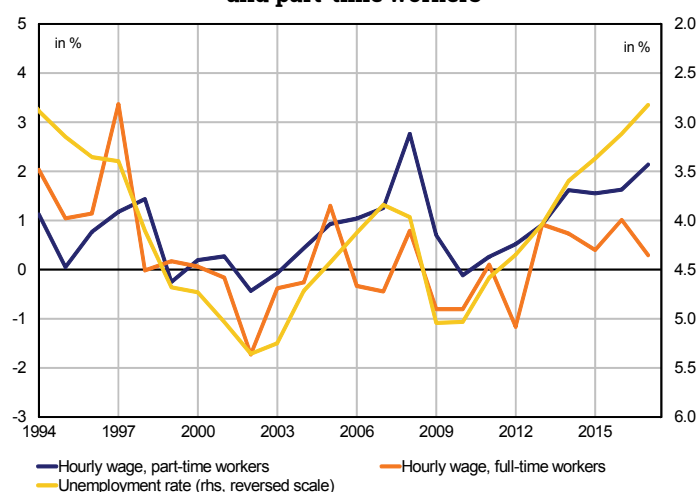
Mobility is very low for full-time workers on permanent contracts (see Table 1) as these workers wish to hold onto the benefits they have accumulated within the company (including retirement bonuses, job security, etc.). By contrast, part-time workers are significantly more mobile. Thus, there is more competition among companies on the part-time job market, and this results in a stronger correlation between the current economic situation and the wage trend for part-time workers.

Table 1: Worker mobility in Q4 2017: proportion of workers having changed jobs in the previous 12 months

Full-time permanent contracts	3.4%
Full-time short-term contracts	6.5%
Part-time workers	7.8%
Temp staff	15.8%
Total	5.9%

Sources: MIC, Labour Force Survey, calculs DGTrésor.

Chart 6: Unemployment rate and hourly wage for full-time and part-time workers



Sources: MHLW, MIC, Cabinet Office. DG Trésor calculations.

2. Since 2013, wages have begun to rise again and could accelerate by 2020

2.1 Since 2013, wages have gathered strength following "Abenomics"

An initial turning point in the wage trend came with the highly accommodative economic policy implemented by Shinzo Abe after he became prime minister in late 2012. At that stage, the wage trend turned positive. Hourly wages began to rise in 2013, with average wages following suit in 2014 (refer to the chart on page 1). The top priority of Abe government's economic policy – baptised "Abenomics" – is to bring the Japanese economy out of deflation permanently. This policy consists of: (i) a very loose monetary policy aimed at depreciating the yen to boost the mark-ups of export firms and rekindle imported inflation, (ii) combined with an expansionary fiscal policy to stimulate domestic demand, and (iii) structural reforms to lift potential growth.⁶

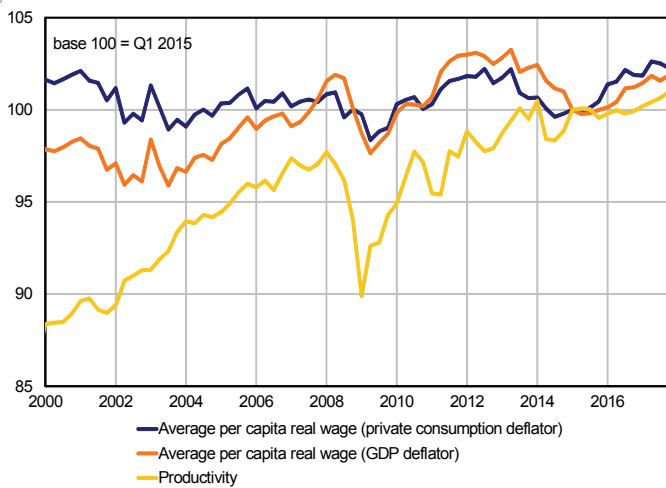
Thus, wage negotiations in spring 2014 saw a return to negotiated wage hikes of more than 2%, signalling fresh

momentum on the base pay scale. The upturn in wages since 2013 reflects the pro-employment effects of the government's expansionary policy, as well as the Abe government's unwritten promise to companies: a corporate tax cut and a recovery in mark-ups (see Chart), achieved through a weaker yen and an expansionary fiscal policy, in exchange for wage hikes.

After lagging behind productivity gains for a long time, wage growth has caught up with productivity since 2015 and is now trending at a similar, or even slightly faster, pace (see Chart 7). However, the trend in average wages has not accelerated very much compared to the low level of unemployment between 2012 and 2017 (see Chart 9) and is not strong enough to achieve the 2% inflation target set by the BoJ in 2013. This relatively lacklustre performance is attributable to past changes in companies' behaviour (see above).

(6) See C. Ciornohuz (2016), "Japan's response to deflation: an assessment of Abenomics", *Trésor-Economics* no. 184.

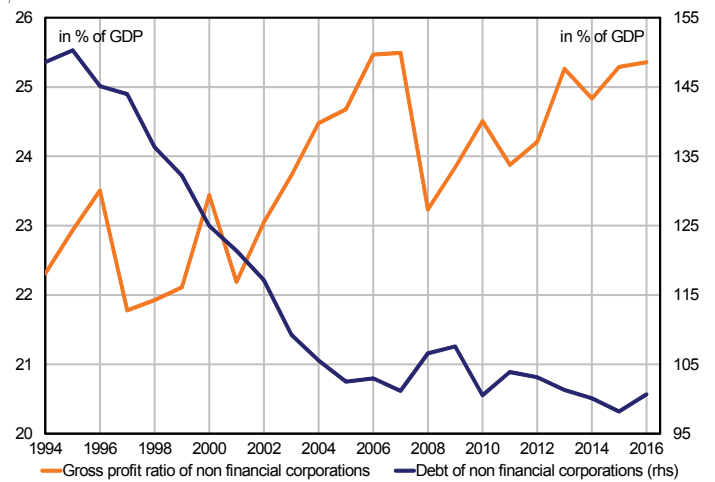
Chart 7: Productivity and real wages



Sources: Cabinet Office, Labour Force Survey. DG Trésor calculations.

How to read this chart: The average per capita wage given in this chart includes social contributions paid by employers and workers.

Chart 8: Gross profit ratio and debt in non-financial corporations



Source: Cabinet Office. DG Trésor calculations.

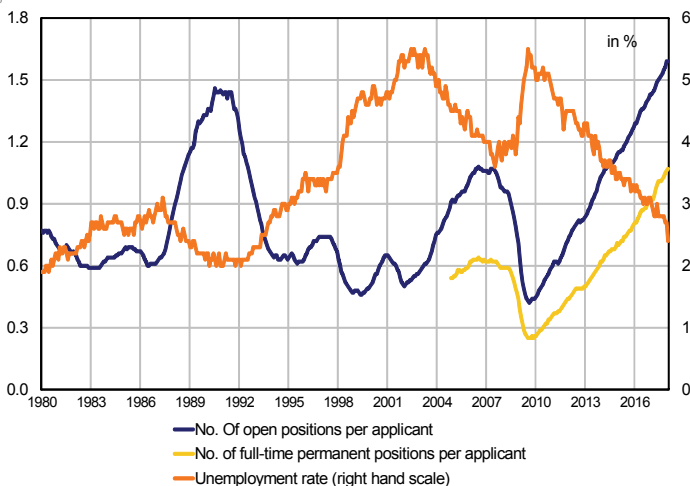
2.2 A combination of supporting factors for wages out to 2020

(i) *The increasing pressure from an ageing population could force companies to hire workers on full-time contracts (which are generally better paid)*

The proportion of part-time and atypical work contracts (as a percentage of total employment) appears to be levelling off in Japan, and this could support wages. This proportion could even decline due to the demographic constraints affecting the labour supply, which could encourage

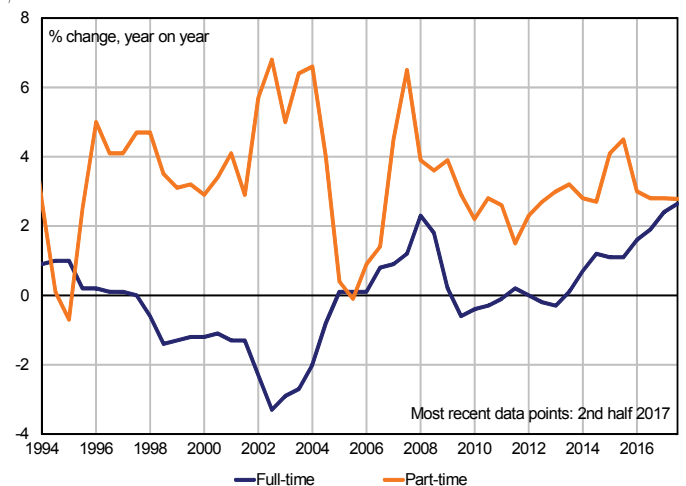
companies to secure their workforce in the medium term – all the more so because they currently report hiring difficulties in all business sectors. Job offers for full-time permanent contracts reached a record high in 2017, while the unemployment rate returned to its record-low levels of the early 1990s (see Chart 9). Thus, we are beginning to witness a reversal of the structure effect linked to the development of short-term contracts. This structure effect weighed on wages until 2017 (see Charts 2 and 10), but could even start to support wages in the future.

Chart 9: Strong pressure on the job market, affecting full-time permanent positions



Sources: MIC, Labour Force Survey.

Chart 10: Full-time employment catches up with part-time employment



Sources: MHLW, Monthly Labour Survey (private-sector firms with more than 5 employees). DG Trésor calculations.

(ii) *The economic context is favourable and likely to support inflation and wages*

Aside from the favourable job market, pressure on Japan's manufacturing capacity is increasing. According to the Tankan Survey (the BoJ's economic outlook survey), Japanese manufacturers are facing strong constraints on their production capacities due to recovering domestic demand and international trade that has regained its momentum. The BoJ calculates that the output gap closed in 2017, strengthening inflationary pressure on the Japanese economy and possibly rekindling a price-wage spiral.

(iii) *Moreover, government policy is strongly focused on boosting wages*

In its determination to support wages, the Japanese government is targeting a 3% p.a. increase in the minimum wage over the period 2016-2023, to bring the hourly minimum wage to ¥1,000 in 2023 (i.e. €7.54), vs. ¥848 in 2017 (i.e. €6.40). The IMF⁷ calculates that a 3% rise in the minimum wage drives a 0.5% increase in the average wage, skewed in favour of part-time workers. Due to thresholds on income tax and social security contributions, these minimum wage hikes have negative effects on the supply of part-time workers. However, new measures slated for introduction in 2018 could ease these effects (see Box 2).

In parallel, the high level of corporate profits (currently at record highs) could support wages in 2018. The next round

of wage negotiations in spring 2018 will show whether firms are ready to go further in accelerating the wage trend, but so far, Prime Minister Abe's clear 3% benchmark appears to be accepted by Keidanren and Rengo, the main unions involved in the negotiations.

Moreover, in December 2017, the governing coalition announced that companies would be eligible for a corporate tax credit if wages rose more than 3% (for large firms) or 1.5% (for SMEs). This tax credit would correspond to a cut in the corporate tax rate from 29.97% to around 25%. The government has also added restrictions to some other tax credits for companies that do not raise wages. These measures were included in the 2018 budget act for a three-year period, which means that they could buoy the variable pay component.

Lastly, a reform of the labour market (known as the "workstyle reform"), currently being debated in the National Diet and slated for implementation in 2019, could shift the balance within companies: the "equal pay for equal work" policy could support the wages of non-regular workers by giving them the right to supplementary income (transportation stipends, bonuses, pension rights, etc.). However, this labour market reform could also lower the number of authorised overtime hours with the implementation of yearly and monthly ceilings that might weigh on wages (see the summary in Table 2).

Table 2: Expected effects of incentive measures and the economic context

	Implementation period	Expected effects on:		
		Hourly wage	Hours worked	Average wage
Demographic decline (pressure on hiring of workers on permanent contracts)		+		+
Favourable economic context		+	+	+
Higher minimum wage	2016 - 2023	+	-	
Tax credit in exchange for wage hikes	2018 - 2020	+	+	+
Reduced wage gap between regular and non-regular employment ("workstyle reform")	2020 - 2021	+		+
Cap on overtime hours ("workstyle reform")	2019 - 2020		-	-
Higher tax threshold for the 2 nd income earner (see Box 2)	2018		+	+

Source: Author's analysis.

(7) C. Aoyagi, G. Ganelli and T. Nour (2016), "Minimum Wage as a Wage Policy Tool in Japan", *IMF Working Paper*, WP/16/232.

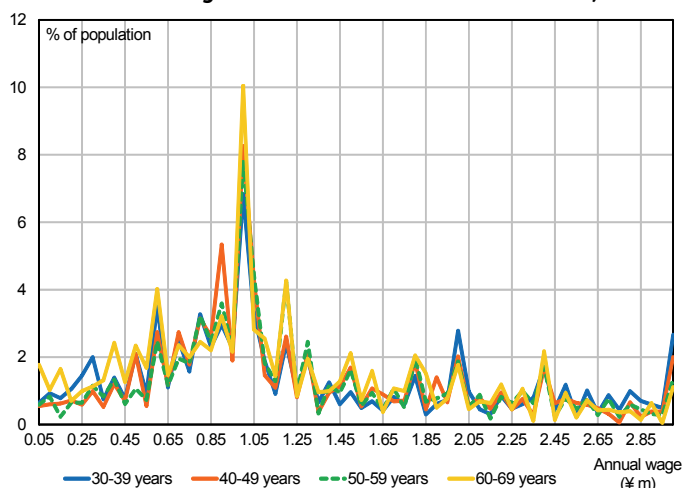
Box 2 : The supply of part-time labour and fiscal and social thresholds

The increases in the hourly minimum wage and therefore in part-time wages (as part-time workers are often paid minimum wage) have not led to similar increases in the average per capita wage for part-time workers. This is because income tax and social security thresholds place limits on the number of hours worked: above ¥1.03m per year (i.e. €7,500) for the second wage earner in a household, the primary wage earner loses a ¥380,000 tax break (€2,850). This threshold effect is even stronger because firms give primary wage earners supplementary income if the second wage earner complies with this income cap, and because social security contributions are due of the second wage earner exceeds a ¥1.30m threshold. These social security contributions are evenly split between the employer and the worker (¥13,078 each per month, i.e. around €100). Since 1 October 2016, the social security threshold has been lowered to ¥1.06m for firms with more than 500 workers, strengthening the threshold effect for an estimated 250,000 workers. These threshold effects weigh mainly on the labour supply of married women (see Chart 11), who cut back on their working hours because of these thresholds.

Since 1 January 2018, the income tax threshold was raised from ¥1.03m to ¥1.5m (however, the social security threshold is still ¥1.06m). In parallel, firms have begun to eli-

minate or scale back their supplementary income schemes following a request from the government and Keidanren (the Japanese business federation) in order to reduce this threshold effect. These recent changes are likely to support the number of hours worked by part-time workers as from 2018.

Chart 11: Wage distribution for married women, 2014



Source: Cabinet Office (Gender Equality Bureau).

How to read this chart: An analysis of the wage distribution of married women highlights the effects of income tax and social security thresholds on the labour supply. The mode of this distribution (irrespective of the age) is below the tax threshold of ¥1.03m.

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Publisher:

Ministère de l'Économie
et des Finances
Direction générale du Trésor
139, rue de Bercy
75575 Paris CEDEX 12

Publication manager:

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English translation:

Centre de traduction
des ministères économique
et financier

Layout:

Maryse Dos Santos
ISSN 1962-400X
eISSN 2417-9698

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