

## Economics

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# Malaysia Macro View

## Assessing the Impact of the Minimum Wage

- **The government announced earlier this week the much-awaited minimum wage –**  
The minimum wage was set at RM900 a month for Peninsular Malaysia and RM800 for Sabah, Sarawak, and the Federal Territory of Labuan for all sectors except the domestic service sector (for example, maids and gardeners). By default, firms will have six months to comply with the Minimum Wage Order; most micro enterprises employing five workers or fewer however will have 12 months for implementation.
- **One quarter of labour force and one-sixth of GDP affected, if fully implemented –**  
*Roughly a quarter of the labour force will be affected by the minimum wage*, though the inclusion of allowances into the minimum wage calculation may reduce this proportion. Impact across sectors via margin squeeze will be uneven, with agriculture likely harder hit than manufacturing and services. Taking mean wage levels across subsectors, we estimate that between 10.3% to 16.5% of Manufacturing GDP (or 2.8 to 4.5% of GDP) could be harder hit, primarily food, textiles, wood and rubber products. Roughly three quarters of the less productive Agriculture sector (or around 5.2% of GDP) would be more exposed while, within Services, Accommodation and Restaurants could be most affected, but these account for only 4.2% of Services GDP. *Including construction, sectors accounting for 13-15% of GDP could see margins squeezed by minimum wage.* If fully implemented, the impact scale would be non-negligible, but still manageable. In reality, implementation hurdles may result in less impact than we estimate.
- **Minimum wage may help consumption, but risks fanning inflation –** The poorest 22% of all households will likely see incomes lifted by minimum wage. Assuming a marginal propensity to consume of 1, consumption of these households under the mandated minimum wage levels could be about RM2.3-2.8bn (0.5-0.7% of PCE) reinforcing the lift from direct fiscal transfers (RM4bn) and higher civil servant wages (RM6bn), and ultimately facilitating a shift away from credit-driven consumption. The flipside of stronger consumption spending is the potential to further add to core inflation pressures, as companies limit margin squeeze by passing on costs, with pricing power facilitated by stronger domestic demand. Inflation impact will likely mainly be felt in labour-intensive Services and certain manufactured goods, with exposed categories accounting for around 18.5% of the CPI basket.
- **Deflecting political fallout from Bersih 3.0, but net impact unclear –** Though timing is purely coincidental, the minimum wage could deflect some political fallout from the Bersih 3.0 rally, the impact of which remains inconclusive. Notwithstanding the negative coverage on the excessive use of force by the police, the govt has also been building a case that Bersih may have been hijacked by the Opposition to provoke the police into overreacting. Delayed elections are not a forgone conclusion, since delayed elections may not necessarily result in a better outcome for PM Najib. We would not exaggerate the impact of the minimum wage announcement, which fell short of demands by workers rights groups while the Opposition has pledged to implement a RM1,100 minimum wage if elected.

See Appendix A-1 for Analyst Certification, Important Disclosures and non-US research analyst disclosures.

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## Assessing the Impact of the Minimum Wage

The government announced earlier this week the much-awaited minimum wage of RM900 a month for Peninsular Malaysia and RM800 for Sabah, Sarawak, and the Federal Territory of Labuan for all sectors except the domestic service sector (for example, maids and gardeners). The government estimates this is equivalent to RM4.33 per hour for Peninsular Malaysia and RM3.85 per hour for Sabah, Sarawak, and Labuan. By default, firms will have six months to comply with the Minimum Wage Order; micro enterprises employing five workers or fewer however will have 12 months for implementation, though this does not include professional firms such as dental and medical clinics, legal, architecture, and consultants. PM Najib was nonetheless quoted saying that firms which are “really unable to implement the minimum wage” could appeal for an extension of the grace period and that “some allowances or fixed cash payments are allowed to be absorbed in the calculation for minimum wage”, though details are scant.

### Putting the Minimum Wage Amount in Perspective

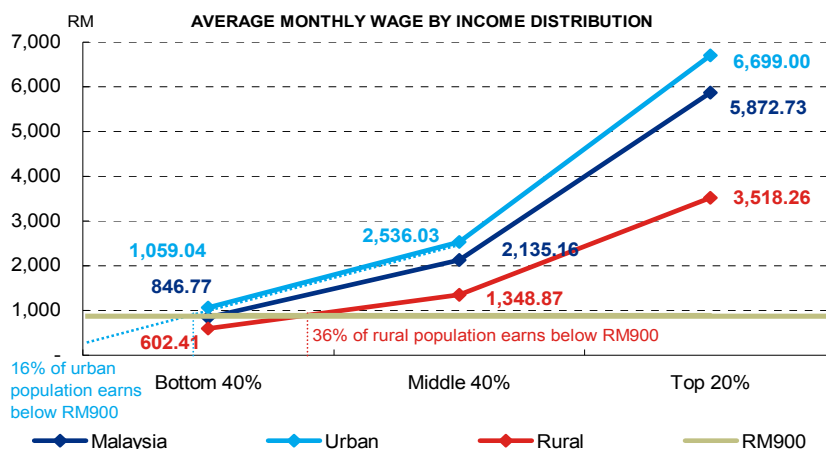
**Just how large are the new minimum wage levels in the overall scheme of things, and what's the proportion of the workforce that could be affected? Taken at face value, the imposition of minimum wage appears to be significant, as it full implementation would impact roughly a quarter of the labour force, resulting in margin compression for some industries, and possibly inflationary consequences.** While comprehensive published data on wage distribution are difficult to come by, media reports citing different sources suggest that around a quarter of the *overall* workforce, and more than half of lower skilled general workers in manufacturing, would benefit from the imposition of a minimum wage.

- The official announcement noted that 3.2mn workers (roughly a quarter of the labour force of 12.7mn) earning below RM700 a month would benefit from the minimum wage
- According to a separate survey by the Federation of Malaysian Manufacturers (FMM)'s *Economic Outlook for the Manufacturing Sector Survey* conducted in April/May 2010, the median basic salary *excluding fixed allowances* for a smaller subset of general workers was already RM700 a month while the mean was RM750. Thus it would appear that more than half of all general workers in the manufacturing sector would benefit from minimum wage, which is 14-28% above median wage levels.
- **Based on household income distribution data available from Economic Planning Unit, we estimate about 22% of households in the country could be affected by the minimum wage.** As more granular data on income distribution are not available, we assume that the mean wage for the bottom 40% of households corresponds to the 20<sup>th</sup> percentile and use a straight-line interpolation to determine the share of households which fall under the minimum wage (taken to be RM900 for simplification). Our estimates show that 36% of rural households and 16% of the urban households (22% of total households) have wages per working person below RM900.

**Nonetheless, a closer look suggests the actual impact may not be as large as it first seems. One reason may be because of given the inclusion of allowances into the minimum wage calculation.** At face value, while the new minimum wage levels appear to 14-28% above current median wage levels for general workers in the manufacturing sector of around RM700mn, these median wage levels exclude fixed allowances. Since the RM900 and RM800 minimum wage figure includes “some allowances or fixed cash payments”, the impact will be

smaller – news reports have already emerged for example that the impact of the minimum wage will be minimal in the Klang Valley, especially once allowances are absorbed into the minimum wage calculation.

**Figure 1. We estimate 36% of rural households and 16% of urban households earn below RM900 – which is about 22% of total households**



Source: Economic Planning Unit, Department of Statistics, CEIC, CIRA Estimates

**While some sub sectors will be hit harder, overall Manufacturing GDP does not look particularly exposed.** Equity strategist Fiona Leong notes that the minimum wage is mildly negative for rubber glove manufacturers, with some firms hiring *foreign* workers that are paid average monthly wages of only RM550-600<sup>1</sup>. Available official data suggests that the *mean* wage for the overall sector (calculated by taking the ratio of monthly payrolls to employment in the Rubber Glove subsector) yields about RM1,434. Note that this higher mean wage figure includes not just foreign workers, but also more highly paid local workers, supervisors, technical and engineers.

**Using these numbers as a guide, we estimate that sub-sectors accounting for at most one-sixth of manufacturing GDP (or 4.5% of overall GDP) would be more exposed to margin squeeze from the minimum wage.** We assume that sectors where mean wages are around or below the rubber-glove mean wage levels of RM1,400 or below would similarly employ a large number of workers earning below the minimum wage. These sectors, and their share of manufacturing are identified in Figures 2 and 3 (we highlight manufacturing sectors with estimated average wage below RM1,500). We note that wage data are available at a much more granular level than the manufacturing output data. To get around this problem, we simply sum up the weights of broader category that encompasses the affected sectors – for example the Rubber Glove sector falls under Rubber Products, which is 3% of overall Manufacturing GDP) – **we find that at most total 16.5% of Manufacturing GDP could be potentially exposed to the minimum wage.** This is, of course, a significant overestimate – Rubber Products comprises more than just the Rubber Glove sector, and includes Rubber Tyres and Tubes where we estimate the ratio of payrolls to employment yields RM2,865 or about double the Rubber Glove sector. Nonetheless, even this overestimate seems far from catastrophic for the overall Manufacturing sector.

<sup>1</sup> Fiona Leong, [Malaysia Strategy - Minimum Wage Set at RM900](#), 2 May 2012

Figure 2. Ratio of Payrolls to Employment by Manufacturing Sector

	Ratio (RM)	% of Manufacturing GDP		Ratio (RM)	% of Manufacturing GDP
<b>Manufacturing Sector</b>	<b>2,329.22</b>	<b>100.0</b>			
<b>Food, Beverages &amp; Tobacco</b>		<b>9.3</b>	<b>PR: Plastic Products</b>		<b>3.1</b>
<b>Food, Beverages &amp; Tobacco: Vege &amp; Animal Oil</b>		<b>2.6</b>	Plastic Blow Moulded Products	1,705.39	
Coconut Oil	1,352.11		Plastic Extruded Products	2,016.96	
Other Vegetable and Animal Oils and Fats	2,723.62		Plastic Bags and Films	2,138.60	
<b>Food, Beverages &amp; Tobacco: Food Processing</b>		<b>3.8</b>	Plastic Form Products	1,707.15	
Canning, Preserving and Processing of Fish etc	1,178.72		Plastic Injection Moulded Components	1,649.63	
Pineapple Canning	1,296.74		Other Plastic Products nec	1,940.23	
Condensed, Powdered and Evaporated Milk	3,921.33		<b>Non Metallic, Basic &amp; Fabricated Metal Pdts (NF)</b>		<b>9.7</b>
Rice Milling	1,807.66		<b>NF: Non Metallic Mineral Products</b>		<b>3.3</b>
Flour Milling	3,837.87		Glass and Glass Products	3,030.52	
Prepared Animal Feeds	2,727.80		Non Structural Non Refractory Ceramic Ware	1,522.85	
Biscuits and Cookies	1,447.48		Refractory Ceramic Products	1,632.24	
Bread, Cake & Other Bakery Product	1,873.09		Structural Non Refractory Clay and Ceramic Products	2,163.49	
Sugar Factories and Refineries	3,161.29		Hydraulic Cement	4,326.81	
Cocoa Products	3,075.88		Ready Mix Concrete	2,609.49	
Chocolate Products and Sugar Confectionery	2,097.23		Other Articles Of Concrete, Cement and Plaster	2,026.88	
Sauces Incl Flavouring Extracts	2,173.58		Other Non Metallic Mineral Products nec	2,729.64	
Snack	1,402.23		<b>NF: Basic Metals</b>		<b>2.1</b>
Other Food Products nec	2,918.34		<b>NF: Fabricated Metals Products</b>		<b>4.3</b>
<b>Food, Beverages &amp; Tobacco: Beverages</b>		<b>1.6</b>	Basic Iron and Steel Products	2,833.90	
Soft Drinks	3,284.20		Other Basic Precious and Non Ferrous Metals	2,855.43	
Mineral Waters	1,281.08		Structural Metal Products	2,224.16	
<b>Food, Beverages &amp; Tobacco: Tobacco</b>		<b>1.3</b>	Tanks, Reservoirs and Containers Of Metal	2,626.51	
Tobacco Manufactures	5,076.52		Forging, Pressing, Stamping & Roll Forming Metal	1,867.91	
<b>Textile, Wearing Apparel &amp; Leather Products (TL)</b>		<b>2.1</b>	Treatment and Coating Of Metals, General Mechanical	2,329.37	
<b>TL: Textile &amp; Wearing Apparel</b>		<b>1.9</b>	Tin Cans and Metal Boxes	2,513.33	
Spinning, Weaving and Finishing of Textiles (SW)	1,757.09		Wire and Wire Products	2,218.58	
SW: Natural Fibre Spinning and Weaving Mills	1,782.61		Brass, Copper, Pewter and Aluminium Products	1,708.30	
SW: Man-Made Fibre, Weaving of Textiles	1,414.78		Other Fabricated Metal Products nec	2,228.40	
SW: Dyeing, Bleaching, Printing & Finishing of Yarn	2,607.62		<b>Electrical &amp; Electronic (EE)</b>		<b>30.0</b>
Knitting Mills	1,447.75		<b>EE: Machinery &amp; Equipment</b>		<b>2.9</b>
Clothing Factories	1,179.16		Pumps, Compressors, Taps and Valves	2,663.32	
<b>TL: Leather &amp; Footwear</b>		<b>0.2</b>	Air Conditioning, Refrigerating and Ventilating Machinery	3,028.21	
Tanneries and Leather Finishing	1,277.53		Machine Tools	2,895.46	
Leather & Leather Substitutes, ex Footwear & Apparel	1,520.83		Other Special Purpose Machinery	2,273.50	
Footwear	1,448.13		Domestic Appliances nec	2,298.21	
<b>Wood &amp; Paper Products, Printing &amp; Publishing (WP)</b>		<b>6.8</b>	<b>EE: Office, Accounting &amp; Computing Machinery</b>		<b>4.3</b>
<b>WP: Wood Products</b>		<b>2.5</b>	Computers and Computers Peripherals	2,123.61	
Veneer Sheets and Plywood	1,007.11		<b>EE: Electrical Machinery &amp; Apparatus</b>		<b>2.4</b>
Laminboard, Particle Board and Other Panels and Boa	2,382.81		Electric Motors, Generators and Transformers	2,099.85	
Builders Carpentry and Joinery	1,440.36		Electricity Distribution & Control Apparatus	2,265.20	
<b>WP: Paper &amp; Paper Products</b>		<b>1.7</b>	Telecommunication Cables and Wires	1,641.91	
Pulp, Paper and Paper Products	2,393.90		Electric Power Cables and Wires	2,840.51	
Containers and Boxes of Paper & Paperboard	2,098.17		Other Insulated Wires and Cables nec	2,042.01	
Envelopes, Letter Cards or Plain Postcards	1,799.53		Accumulators, Primary Cells & Batteries	2,591.72	
Toilet Papers, Cleansing Tissues, Towels and Service	2,002.52		Electric Lamps & Lighting Equipment	1,957.32	
Adhesive Paper in Strips or Rolls and Labels, Wall	2,466.46		Other Electrical Equipment n.e.c	1,529.89	
<b>WP: Publish, Print &amp; Repdt of Recorded Media</b>		<b>1.5</b>	<b>EE: Radio, TV &amp; Communication Equipment</b>		<b>20.5</b>
Books, Brochures, Musical Books and Other Publications	2,785.31		Semi Conductor Devices	3,004.31	
Newspaper, Journals and Periodicals	4,898.78		Electronic Valves and Tubes and Printed Circuit Boa	2,323.93	
Other Publishing	4,036.30		Other Electronic Components nec	2,189.79	
Printing	1,895.54		TV, Radio Transmitters Apparatus For Line Telephony	2,440.87	
Service Activities Related To Printing	2,242.09		TV, Radio Receivers, Sound Recording Or Reproducing	1,990.66	
<b>WP: Furniture</b>		<b>1.2</b>			

Note: We use 2010 Manufacturing GDP (2000 prices)

Source: CEIC, CIRA Estimates

Figure 3. Ratio of Payrolls to Employment by Manufacturing Sector (continued)

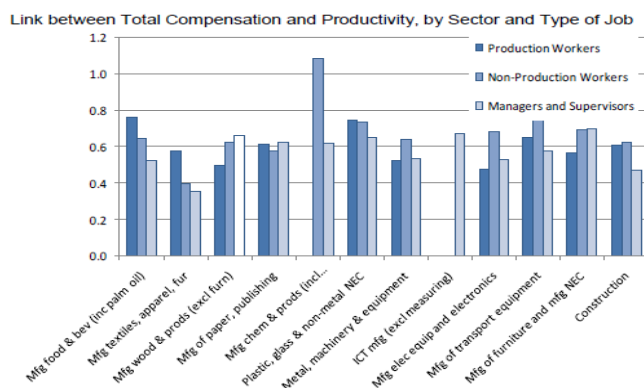
	Ratio (RM)	% of Manufacturing GDP		Ratio (RM)	% of Manufacturing GDP
<b>Petroleum, Chemical, Rubber &amp; Plastic Products (PR)</b>		<b>25.6</b>	<b>Transport Equipment &amp; Other Manufacturers (TE)</b>		<b>16.4</b>
<b>PR: Refined Petroleum Products</b>		<b>9.0</b>	<b>TE: Medical, Precision &amp; Optical Instrument</b>		<b>3.4</b>
Refined Petroleum Products	10,354.34		Medical and Surgical Equipment and Orthopaedic Appliances	2,549.02	
<b>PR: Chemical &amp; Chemical Products</b>		<b>10.7</b>	Instruments For Measuring, Checking excl Industrial Optical Instruments	3,892.60	
Compressed, Liquefied or Solid Industrial Gases	8,455.79		Photographic Equipment	1,685.39	
Other Basic Industrial Chemicals excl Fertilizer	7,407.94		Clocks and Watches	1,833.99	
Fertilizer and Nitrogen	7,160.49			2,493.46	
Plastic In Primary Form and Of Synthetic Rubber	4,874.66		<b>TE: Motor Vehicle &amp; Transport Equipment</b>		<b>12.1</b>
Pesticides and Other Agrochemical Products	2,421.41		Motor Vehicles	3,316.07	
Paints, Varnishes and Lacquers	3,253.51		Bodies of Motor Vehicles; Trailers & Semi Trailers	2,218.25	
Printing Ink	3,562.30		Motor Vehicles Parts and Accessories	2,112.03	
Pharmaceuticals, Medicinal Chemical and Botanical P	2,463.84		Building & Repairing of Ships	3,251.98	
Soaps, Detergents, Perfumes & Toilet Preparation	3,484.82		Motorcycles	2,037.37	
Other Chemical Products nec	3,512.35		Bicycle & Invalid Carriages	1,884.37	
<b>PR: Rubber Products</b>		<b>3.0</b>	<b>TE: Other</b>		<b>1.0</b>
Rubber Tyres and Tubes	2,865.06		Wooden and Cane Furniture	1,315.21	
Retreating and Rebuilding Rubber Tyres	1,656.77		Other Furniture, excl Of Stone, Concrete Or Ceramic	1,428.84	
Rubber Remilling and Latex Processing	1,558.14		Jewellery and Related Articles	2,114.82	
Rubber Gloves	1,434.41		Sports Goods	1,329.80	
Other Rubber Products nec	1,777.28		Games and Toys	1,463.19	
			Pens, Pencils, Office and Artists Supplies	1,470.27	

Note: We use 2010 Manufacturing GDP (2000 prices)

Source: CEIC, CIRA Estimates

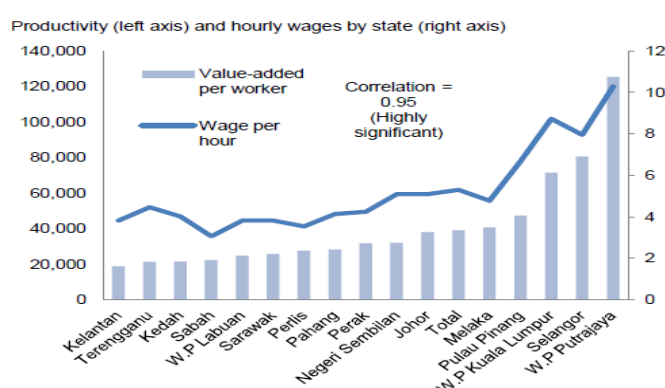
**Alternatively, we look at the impact by regions, which have different levels of productivity and hence different wage levels.** We note that the World Bank's studies show robust correlation between wages and both skill levels and productivity – there appears to be a link between productivity and wages across regions and across different types of jobs. The different levels of productivity for Agriculture for example in different states for example likely correspond to higher Agriculture wages in those states.

Figure 4. Wages are linked to productivity across types of jobs...



Source: World Bank

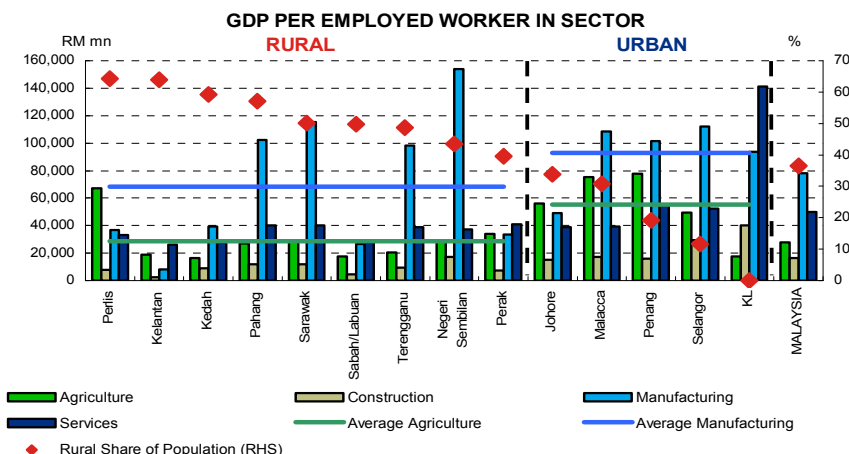
Figure 5. ... and across regions



Source: World Bank

**In general, around 73.7% of Agricultural GDP is in low wage/low productivity states (around 5.2% of overall GDP).** Agriculture productivity is higher in Perlis, Johore, Malacca, Penang, and Selangor, which account for 26.3% of overall Agriculture GDP, reducing the overall exposure of the Agriculture sector to the minimum wage. In any case, any impact on overall GDP is likely minimal given Agriculture accounts for only 7% of GDP.

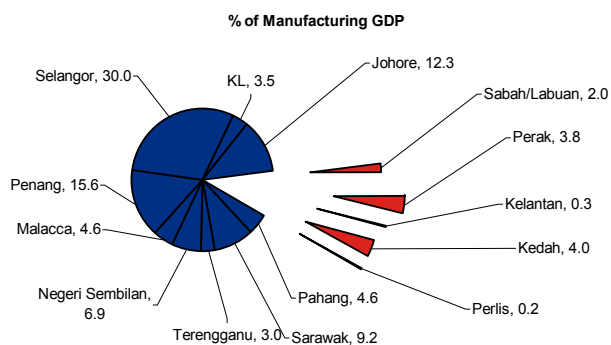
**Figure 6. More rural states are more heavily employed in Agriculture, which tends to lag Manufacturing in terms of labour productivity**



Source: CEIC, CIRA Estimates

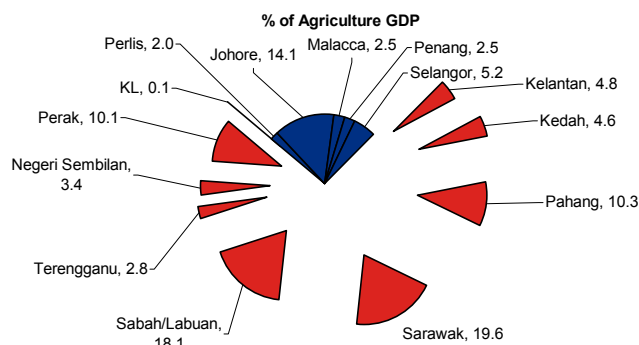
**Extending the idea that higher productivity tends to lead to higher wages to Manufacturing, we find that the overall impact appears limited.** The states where Manufacturing productivity is relatively low and thus more “exposed” to the minimum wage – Sabah, Perak, Kelantan, Kedah, and Perlis – account for only 10.3% of overall Manufacturing GDP, which is lower than the earlier of 16.5% obtained via sectoral analysis.

**Figure 7. Only about 10.3% of Manufacturing GDP (2.7% of overall GDP) is accounted for by states where Manufacturing productivity (and likely wages) is relatively low...**



Source: CEIC, CIRA Estimates

**Figure 8. ... but 74% of Agriculture GDP ( 5.2% of overall GDP) is from states where productivity and (likely wages) is low**

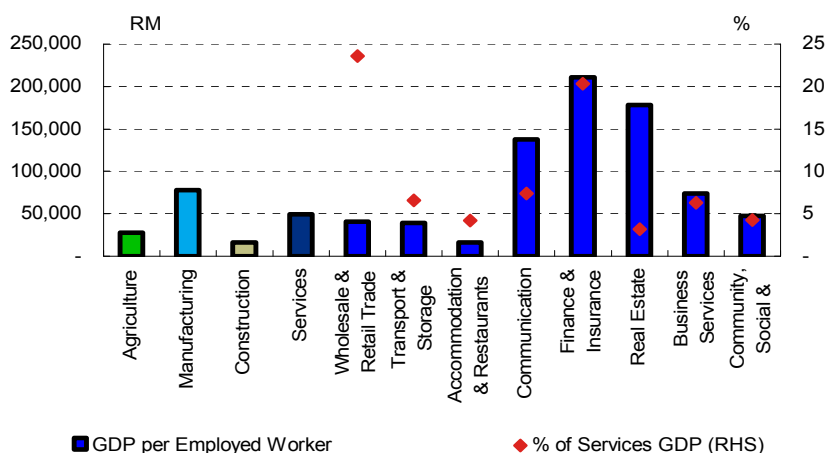


Source: CEIC, CIRA Estimates

**Within Services, Accommodation and Restaurants could be most affected, though its impact on overall Services will likely be minimal as the sector accounts for only 4.2% of Services GDP (or around 2.5% of overall GDP). GDP per employed worker – our proxy for productivity – for Accommodation and Restaurants is only about 60% that of Agriculture.**



Figure 9. Accommodation & Restaurants looks most exposed to the minimum wage but accounts for only 4.2% of Services GDP



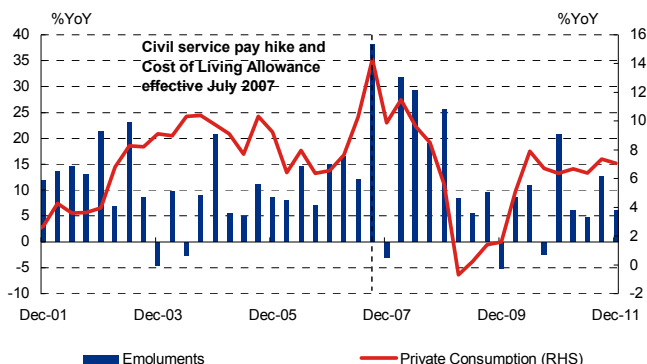
Source: CEIC, CIRA Estimates

**Summing up, we find that about 13-15% of GDP might be exposed to the effects of the minimum wage, principally via margin squeeze:**

- **Between 10.3-16.5% of Manufacturing GDP** could be affected by the minimum wage, with the former based on states with low Manufacturing productivity and the latter based on sectors with lower mean wages. This translates to about 2.8-4.5% of overall GDP.
- **Around 73.7% of Agriculture GDP** is accounted for by states with low Agriculture productivity – or 5.2% of overall GDP.
- **Accommodation and Restaurants accounts for 4.2% of Services GDP** and appears most exposed to the minimum wage – about 2.5% of overall GDP.
- **While we do not have data on construction wages, it seems reasonable to assume that construction is exposed and this accounts for about 3% of overall GDP.**

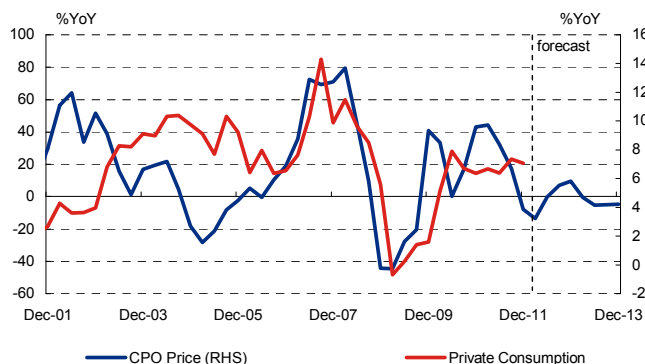
The minimum wage would lift the incomes of the poorest quarter of the labour force or poorest 22% of households (that has the highest marginal propensity to consume), giving a modest lift to consumption. If we assume all of the 3.2mn workers that benefit from minimum wage earn around RM900/m, the total incomes earned by these workers would be around RM2.9bn. **Assuming a marginal propensity to consume of 1, this would account for roughly 0.5-0.7% of overall private consumption expenditure, or 0.3-0.4% of GDP.** This will augment the addition to incomes from the recent civil service wage hike (RM6bn), and fiscal transfers (RM4bn), and could facilitate a shift away from unsustainable credit-fueled consumption. A study by Bank Negara revealed that more than half of the variation in consumption is attributed to income (as measured by disposable income), while less than 10% is attributed to credit-related variables.

Figure 10. The 7.5-42% hike in civil service wages in Jul 2007 coincided with an acceleration in private consumption in 2H07...



Source: CEIC, CIRA

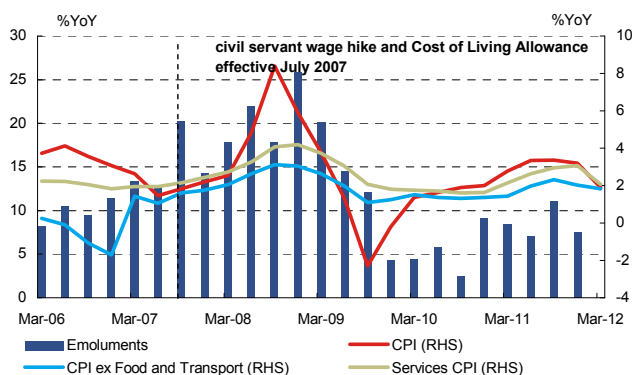
Figure 11. ...even as record high CPO prices in that time boosted rural incomes further



Source: CEIC, CIRA Estimates

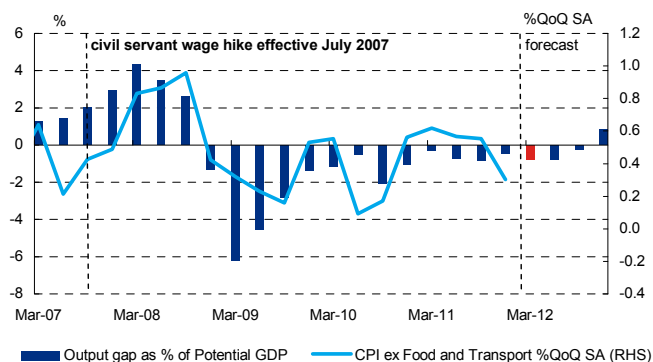
**The minimum wage lift to consumption – adding onto the recent civil service wage hike – has the potential to further add to core inflation pressures in 2H12, in addition to pipeline pressures from commodity prices.** The 2007 civil service wage hikes for example preceded a surge in both headline and core CPI in 2H07-1H08. Labour-intensive services costs also accelerated, possibly reflecting spillover effects to GLC and private sector wages. While the negative output gap presently gives policymakers hope that the pass through to consumer prices will be reduced, it is also possible that affected companies may use the six to twelve month grace period for implementation to increase selling prices and some might even “pre-emptively” pass on the higher wage costs, increasing margins now to compensate for lower margins later. Higher wage and consumption levels would likely increase the pricing power of affected producers to do so. We expect some modest inflation impact to kick in towards end 2012, or even possibly earlier.

Figure 12. The minimum wage could potentially feed core inflation, if the civil service wage hike experience in 2H07 serves as a guide



Source: CEIC, CIRA Estimates

Figure 13. There is far less economic slack now than in 2007 as indicated by negative output gap



Source: CEIC, CIRA Estimates

**The inflation impact will likely be most directly felt in Services (47.5% of CPI basket) which tends to be more labour intensive, particularly Restaurants and Hotels (3.2% weight), as well as Food Away from Home (10% weight).** As we have argued above, Accommodation and Restaurants appear to be the most exposed sector within Services, though other sectors could also come under price pressure as service providers pass on labour costs to consumers. A larger impact could however come through the Food Away from Home category, which is likely exposed to labour cost pressures in the food and beverage industry. Based on our



estimates of which Manufacturing sectors could be more affected by the minimum wage, we identify corresponding CPI categories and their respective CPI weights as best as we can in Figure 14. In total, the exposed CPI categories could reach up to 18.74% of the CPI basket.

**Figure 14. CPI categories which could be impacted by the minimum wage**

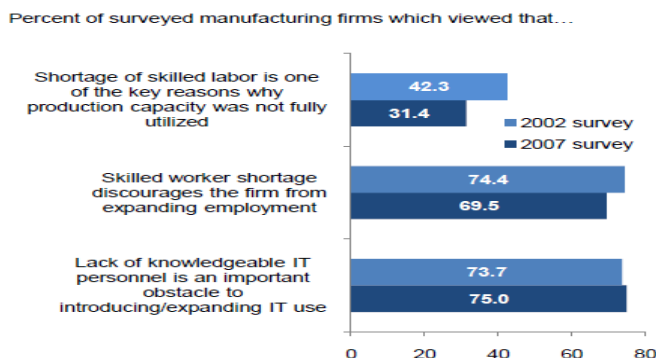
CPI Categories	Weight
Food at Home: Preserved Fruits	0.08
Food at Home: Coconut & Nuts	0.19
Food Away From Home	10.04
Coffee, Tea, Cocoa & Non Alcoholic Beverages: Mineral Water, Soft Drink, Juices	0.62
Clothing & Footwear: Clothing	2.78
Housing, Water, Electricity, Gas & Other Fuels: Maintenance & Repair	0.67
Furnishings, Household Equip & Maintenance: Furniture & Furnishings	0.88
Recreation and Culture: Other Recreation Item & Equip, Garden & Pets: Games, Toys and Hobbies	0.02
Recreation and Culture: Other Recreation Item & Equip, Garden & Pets: Sports Equipment	0.02
Recreation and Culture: Newspaper, Books & Stationery: Writing & Drawing Equipment	0.24
Restaurants & Hotels	3.20
<b>TOTAL</b>	<b>18.74</b>

Source: CEIC, CIRA

**The degree to which the minimum wage will directly impact inflation and margins will depend on whether firms can respond by successfully increasing productivity – but this will likely be limited by the narrow domestic skill base.**

It has been argued that, by ending the easy availability of cheap labour, a minimum wage will pressure employers into making investments that raise the productivity of their workers. But there is already evidence that firms in Malaysia have chosen *not* to invest because of the lack of skilled workers – World Bank surveys have found that Malaysian manufacturers were kept from operating at full capacity and were deterred from scaling up employment or investing to enhance productivity for this very reason. The World Bank's investment climate assessment also highlighted the poor skills quality as the top investment climate obstacles for about 40% of the 1,400 firms surveyed. At the same time, skills mismatches will likely prove a problem for firms to take advantage of any productivity-increasing investments. Malaysian firms identified the lack of non-routine skills as key constraints in the 2007 Productivity and Investment Climate Survey – not because there were not enough graduates but because the graduates did not have the necessary skills. World Bank's recent investment climate assessment also pointed to a tight labour market for skills in Malaysia; a 2007 survey of Malaysian manufacturers found that it took an average of a long six weeks to recruit a professional worker and that this had in fact worsened slightly from 2002. As a result, graduate unemployment is high, even for Science and Business graduates.

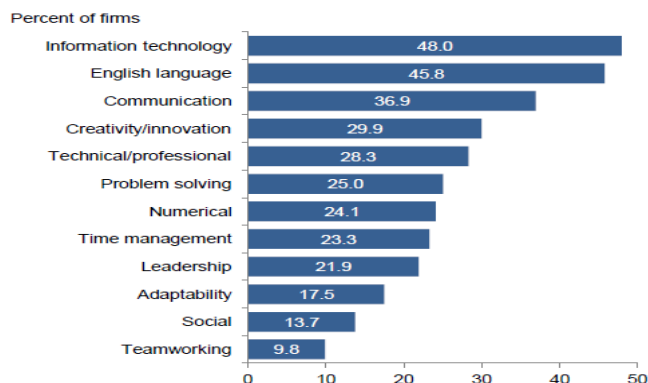
Figure 15. Productivity-enhancing investments and expansion plans have already been adversely affected by the lack of skilled workers



Source: World Bank (2009a)

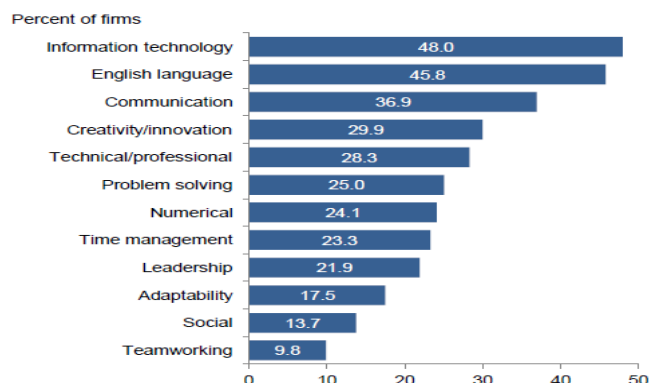
Source: World Bank

Figure 17. ...despite the fact that there are enough graduates



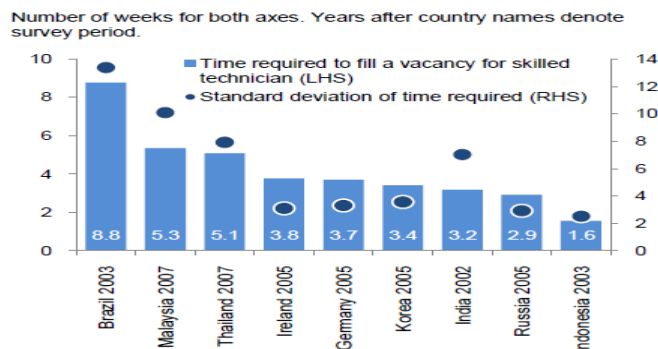
Source: World Bank

Figure 16. Non-routine and other soft skills are a constraint for firms...



Source: World Bank

Figure 18. It takes longer to find a skilled technician in Malaysia compared to international averages



Source: World Bank's global investment climate survey database

Source: World Bank

Figure 19. Graduate unemployment rates 18-30months after the end of classes are high even for Science and Business graduates

Field of Study	IPTA (Public)		IPTS (Private)	
	Bachelor's Level	Below Bachelor's	Bachelor's Level	Below Bachelor's
Arts/Business	22.9%	28.4%	28.2%	35.4%
Science	16.6%	23.4%	13.2%	26.4%
Technical	11%	20%	11.6%	28%
ICT	13.4%	28.7%	16.8%	30.8%
Education	0.6%	-	-	50%

Source: World Bank

**Ultimately human capital is still key to raising productivity, but any significant reforms will likely have to wait until after elections – and will depend crucially on the outcome.** Should the ruling BN coalition be re-elected with an improved margin of victory, this could provide PM Najib with a mandate to push through reforms, though the most sensitive reforms on affirmative action remain unlikely; a poorer showing could however strengthen the hand of anti-reform elements within the United Malays National Organization (UMNO) and stall further reform. Meanwhile the Opposition has run on a platform of reform and could go as far as to dismantle affirmative action policies at least in education.

**While the timing is purely coincidental, the minimum wage may help to deflect some of the political fallout from the Bersih 3.0 rally last weekend, but even here, its degree of political success remains unclear.** The minimum wage will clearly benefit the rural – largely Malay – population more, which is clearly the key electoral battleground as it was the loss of the Malay vote which had underpinned the BN's poor showing in the last election in 2008. But whether the rural population will be swayed on the minimum wage alone is questionable – the RM800-900 minimum wage fell short of levels demanded by workers rights groups such as the Malaysian Trades Union Congress (MTUC) which expressed disappointment that its proposed RM1,200 level had not been implemented. Meanwhile the Opposition has pledged to implement a RM1,100 minimum wage if it is elected, boasting that it has already done so for staff in all state agencies and government-linked companies including local councils in Opposition-controlled Penang. The degree to which PM Najib will be able to capitalize on the minimum wage to win support will depend on how effectively the Opposition can get out its message – which is a challenge when traditional media such as television and newspapers are heavily state-controlled.

**Meanwhile, we would not be so quick to write off the recent Bersih 3.0 rally as a political catastrophe for the government.** The Bersih fallout continues to play out and the impact remains inconclusive. Obviously focusing exclusively on the social media's negative coverage of the use of force by the police would bring one to very negative conclusion for PM Najib's election prospects. However, the government has also been building a case that Bersih may have been hijacked by the Opposition and deliberately used to provoke the police into overreacting – a case which the local state-controlled media has played up, which could possibly galvanize some fence sitters against the Opposition. Ultimately, we suspect the Bersih event has probably solidified the positions of both BN and Opposition supporters, but the impact on fence-sitters is not conclusive.

**It is moreover not quite clear whether delaying the elections will necessarily result in a better outcome for PM Najib.** The government's fiscal bullets (including handouts for the poor and civil servant wage hikes) are currently being disbursed, and as memories are short, September could be too late to exploit the full impact of government largesse. Given the risk of fiscal slippage from the civil servant wage hike, the government may also be running out of fiscal bullets, especially given recent comments by S&P that Malaysia could risk being placed on negative outlook should it hesitate from reining in handouts and subsidies after elections. Also, going by the pattern of recent events, it is quite possible that the Opposition could engineer another scandal/protest rally on the eve of a delayed election date.

## Appendix A-1

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