Local resilience and the COVID-19 economic crisis

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First things first, stay in as much as possible. Never before such a simple action could have such a big impact. From protecting your loved ones to helping the economy, staying in is currently one of our best weapons. The more we stay in, the quicker we will be out of this challenge.

Beyond the current health crisis, the economy is bracing for a significant downturn as well. This may be secondary at the moment but it is worth remembering that economic crises, and their management, <u>cost lives as well</u>. Undoubtedly, there is an economic challenge in front of us. At the very basic level, production is the outcome of the combination of capital and labour, and whatever you multiply by zero labour is zero product.

Estimating the crisis impact is difficult and risky. We have a systemic downturn on one of the most complex systems, our interconnected global society. What we can do about this is 1) test alternative scenarios such what <u>André Carrascal-Incera</u> has done <u>here</u>, <u>here</u> and <u>here</u> and 2) consider the particularities of places and the extent of interconnectedness as <u>Simon Collinson</u> is doing <u>in his blog</u>.

What I am focusing on, is a reflection on the magnitude of the 2008 crisis and a consideration of the factors at play for the current one for the West Midlands. From past experience, we know that the economic crisis will not be the same across places (Kitsos and Bishop, 2018). Different characteristics will exacerbate or mitigate the crash making local resilience a key determinant of the degree of the impact across different localities.

Tables 1 & 2 show the 2008 crisis impact on the UK, West Midlands Combined Authority (WMCA), constituent Local Authorities and Local Enterprise Partnerships. These geographies enable us to both see how the combined authority has performed differently compared to the country and how the different areas within the combined authority experienced the 2008 crisis.

The employment rate drops show the difference between the highest pre-recession and the lowest post-recession employment rate. WMCA has lost twice the percentage points (5.4) of the UK drop (2.4). Employment numbers were down by 50,000 jobs or 4.48% of the pre-recession peak. Similar variations are found for unemployment rates and numbers of those unemployed as well as those claiming for Job Seekers Allowance (JSA) and the GVA.

The differences within WMCA are even greater with Solihull losing 13% of its peak employment figure, Dudley seeing an increase of 260% in the number of those unemployed and Wolverhampton losing approximately 17% of its peak real GVA.

Table 1: The 2008 crisis impact

Peak to trough impact 2004-2017									
Geography	Employm ent rate drop	Employm ent decrease (000s)	Employm ent number % drop	Unemploym ent rate increase	Unemploym ent increase (000s)	Unemploym ent number % increase			
United Kingdom	-2.7	489.7	-1.70	3.4	1,108.5	78.8			

West Midlands Combined Authority	-5.4	49.9	-4.48	5.6	72.4	88.9
Birmingham local authority	-8.1	17.7	-4.32	7	36.6	95.1
Coventry local authority	-8.5	10.6	-7.54	4.5	6.6	91.7
Dudley local authority	-6.9	15.9	-10.74	7.7	11.4	259.1
Sandwell local authority	-5.6	5.9	-4.93	8.8	12.4	130.5
Solihull local authority	-10.7	12.5	-12.90	5.3	4.5	107.1
Walsall local authority	-7.8	8.9	-7.97	6.2	7.7	108.5
Wolverhamp ton local authority	-8.2	10.5	-10.05	8.8	9.9	167.8
Black Country LEP	-5.9	29.7	-6.22	7.6	39.7	139.3
Coventry and Warwickshir e LEP	-6	26	-6.41	4.9	21	142.9
Greater Birmingham and Solihull LEP	-5.8	32	-3.90	4.3	40	70.5

Source: Author's elaboration of ONS data.

Table 2: The 2008 crisis impact

		Peak to trough impact 2004-2017								
Geography	164	JSA	164	real GVA loss	0/ 1					
	JSA rate increase	increase (000s)	JSA number % increase	in 2016 £ million	% drop in real GVA					
United Kingdom	2.1	900.2	114.6	69,051	-4.28					
West Midlands Combined Authority	3.2	59	101.2	4,405	-7.66					
Birmingham local authority	3	22.8	76.9	1,628	-6.66					
Coventry local authority	3	6.5	124.5	566	-7.40					

Dudley local authority	3.3	6.3	128.6	495	-9.83
Sandwell local authority	3.6	7.7	118.5	650	-12.12
Solihull local authority	2.8	3.6	188.2	963	-14.33
Walsall local authority	3.9	6.7	146.0	353	-8.77
Wolverhampton local authority	4.3	7.1	127.1	855	-16.87
Black Country LEP	3.7	27	125.0	1,750	-9.03
Coventry and Warwickshire LEP	2.5	14.3	153.1	2,171	-9.81
Greater Birmingham and Solihull LEP	2.9	37	99.4	3,231	-7.20

Source: Author's elaboration of ONS data.

Current scenario <u>estimates</u>, under what may shortly seem as optimistic assumptions, suggest a loss of 65,000 jobs and 4.75% of GVA for the WMCA. So the region is looking at least at a similar impact to the 2008 crisis albeit within a much shorter timeframe.

There are not many reasons to support that the impact of this crisis will be geographically homogenous. Indeed the shock is different and social distancing and closures are universally applied across the country, but resilience determinants such as local industrial structure characteristics, human capital (Kitsos, 2020) and household incomes remain unevenly distributed across space.

Below we take a look at some of the variables that are likely to influence the economic hit for the region and constituent geographies.

- Previously identified resilience factors

WMCA has lower than average share of self-employed than the country (Table 3). The self-employed have been identified as a particularly vulnerable group during the current crisis due to the lockdown. Simultaneously, the region suffers from lower than average level of qualifications and higher than average share of population without any qualifications. These factors have been previously identify as significant determinants of how the 2008 crisis impacted on local authorities (Kitsos and Bishop, 2018, Lee, 2014). Given the over-representation of low qualifications in transport and distribution that continues at the time of writing, it is likely that most of the COVID-19 economic crisis will hit those in the middle of the qualification distribution (NVQ1, NVQ2, NVQ3). It is important to note the significant variations within the WMCA in terms of qualifications.

In terms of Gross Disposable Household Income (GDHI, table 3 and figure 1), WMCA is only at 75% of the UK average. If this is linked to reduced levels of savings, households in the West Midlands are expected to be more dependent on regular employment income and hence, at a precarious position during and after the lockdown. It also can have significant knock on effects on local authority budgets in the case that reducing disposable incomes leads to deferring the payment of council taxes and an increase in requests for support.

Table 3: Performance in resilience critical factors

Geography	Self-Employed %	NVQ4+ %	No NVQ %	GDHI/head £
United Kingdom	10.6	39.2	8	19,514
West Midlands Combined Authority	7.8	30.5	12.9	14,846
Birmingham local authority	7.9	33.2	12	14,128
Coventry local authority	6.5	35.3	10.3	14,455
Dudley local authority	9.2	24.4	14.1	15,698
Sandwell local authority	6.8	21.1	20.3	13,359
Solihull local authority	9	40.2	6.9	21,782
Walsall local authority	7.7	30.2	11.4	14,300
Wolverhampton local authority	7.7	22.8	16.3	14,231
Black Country LEP	7.8	24.5	15.7	14,403
Coventry and Warwickshire LEP	9.2	38.2	9	19,146
Greater Birmingham and Solihull LEP	9.1	33.8	9.3	16,476

Source: Author's elaboration of ONS data

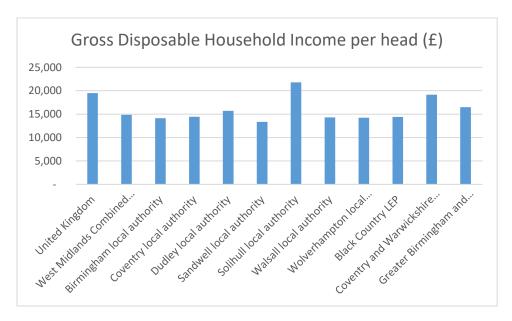


Figure 1: GDHI per head (£)

Together with the self-employed, newly born firms are also expected to be increasingly impacted. The lack of credit history, and possibly experience, may make it harder for entrepreneurs to access financing either through traditional channels or via the government support schemes. The WMCA shows similar entrepreneurship rates to the rest of the country (Table 4), although the lower survival rates and proportion of high growth firms point to increase vulnerability.

Research suggests that places with higher entrepreneurial activity have been hit harder during the recession period but recovered faster during the upturn of the 2008 crisis (Kacher et al., 2018). This makes the case for business support even stronger during downturns.

Table 4: Entrepreneurship statistics

	Business Births per	5-year	high-growth firms per
Geography	1000 population	survival rate	1000 population

United Kingdom	5.7	42.4	0.21
West Midlands Combined Authority	5.8	40.5	0.16
Birmingham local authority	8.2	39.4	0.15
Coventry local authority	4.4	40.6	0.15
Dudley local authority	3.8	42.7	0.17
Sandwell local authority	4.2	38.9	0.11
Solihull local authority	5.0	45.9	0.26
Walsall local authority	3.9	40.5	0.14
Wolverhampton local authority	4.3	39.4	0.15

Source: Author's elaboration of ONS data. Birth rates for Birmingham and WMCA may be overestimating births due to multiple enterprises registering in the same postcode. For more information see here

- Industrial structure

Another important factor is likely to be the relative share of industries in terms of employment and businesses (Tables 5 & 6). As André discussed in his blogs, some sectors will be severely negatively affected (see hospitality related activities) whilst some will see an increase in demand (health services). Equally important are the links of these industries with rest of the economy both in terms of resilience (Kitsos et al., 2019) and in terms of contagion. The high concentrations of manufacturing and wholesale and retail need particular attention in the WMCA. Especially for manufacturing, the presence of dense value and supply chains make contagion a critical matter.

Table 5: Share of sector by employment

Geography/Sector	С	F	G	Н	I	J	K	L	М	N	0	Р	Q
Great Britain	7.9	4.8	15.1	4.7	7.5	4.1	3.3	1.9	8.7	8.8	4.1	8.5	12.9
West Midlands Combined Authority	10.6	4.3	16.1	5.4	5.2	2.4	3.3	2.1	7.3	9.4	3.9	10.5	14
Birmingham local authority	7.3	3.8	14.6	4.8	5.4	2.7	4.4	1.9	9.8	9	4.8	11	15.6
Coventry local authority	11	2.7	14.6	3.7	4.9	2.7	3	1.5	7.3	10.4	3.7	14	13.4
Dudley local authority	14.8	7	20.9	2.6	5.2	1.7	1.3	2.6	5.2	5.2	3.5	9.6	15.7
Sandwell local authority	16.4	5.5	19.5	7.8	4.7	1.2	1.2	2	4.7	7.8	2	7.8	12.5
Solihull local authority	10.4	4.8	12	7.2	7.2	4.8	3.2	2.8	8.8	16	3.6	8	8
Walsall local authority	12.6	4.5	18	9	4.1	1.1	2.3	1.8	4.1	11.7	2.3	9.9	11.7
Wolverhampton local authority	12.4	4.3	18.1	5.7	4.8	1.9	3.3	2.4	3.8	5.7	4.3	9.5	17.1
Black Country LEP	14.2	5.5	19.2	6.3	4.6	1.5	2	2.2	4.4	7.6	3.1	9.4	14.2
Coventry and Warwickshire LEP	11.6	4	15.6	6.1	6.1	3.4	2.3	1.5	8.2	8.7	3.2	9.5	11.4
Greater Birmingham and Solihull LEP	9.6	4.7	15.6	5.5	5.9	2.8	3.4	1.8	8.6	10.6	3.8	9.3	13.1

Source: Author's elaboration from ONS data. Sectors - C: Manufacturing; F: Construction; G: Wholesale and retail trade; repair of motor vehicles and motorcycles; H: Transportation and storage; I: Accommodation and food service activities; J: Information and communication; K: Financial and insurance activities; L: Real estate activities; M: Professional, scientific and technical activities; N: Administrative and support service activities; O: Public administration and defence; compulsory social security; P: Education; Q: Human health and social work activities

Table 6: Share of sector by number of businesses

Geography/Sector	С	F	G	Н	I	J	K	L	М	N	0	Р	Q
United Kingdom	4.7	11.1	16.3	4.0	6.4	7.4	2.4	3.6	15.5	8.5	0.8	2.4	5.1
West Midlands Combined Authority	6.6	9.7	20.3	6.3	6.3	5.7	2.2	3.5	12.6	10.5	0.5	2.5	6.3
Birmingham local authority	5.3	7.7	20.6	4.7	6.5	5.6	2.4	3.8	13.3	13.5	0.5	2.6	7.0
Coventry local authority	6.3	8.7	18.0	7.7	6.4	8.2	2.2	3.0	15.5	8.5	0.5	2.5	5.6
Dudley local authority	9.7	13.5	21.8	5.6	6.1	4.4	2.2	2.7	11.1	7.7	0.4	2.2	5.5
Sandwell local authority	9.6	9.8	23.3	10.7	6.6	3.6	1.7	3.0	7.9	8.6	0.4	2.3	5.8
Solihull local authority	3.1	11.8	14.5	4.0	5.2	9.5	3.0	4.4	18.3	9.3	0.6	2.3	6.4
Walsall local authority	9.4	12.8	21.0	8.2	6.6	3.6	1.5	3.1	9.6	7.9	0.4	2.6	5.8

Wolverhampton local authority	7.1	10.7	22.0	9.1	6.5	4.4	2.2	3.8	9.7	8.1	0.5	2.5	6.5
Black Country LEP	9.0	11.7	22.0	8.3	6.4	4.0	1.9	3.1	9.6	8.1	0.4	2.4	5.9
Coventry and Warwickshire LEP	5.7	9.0	15.7	7.1	6.2	7.0	2.0	3.4	17.4	9.0	0.7	2.4	4.5
Greater Birmingham and Solihull LEP	5.5	10.2	18.5	5.8	6.2	5.8	2.3	3.8	13.8	11.3	0.6	2.5	5.9

Source: Author's elaboration from ONS data. Sectors - C: Manufacturing; F: Construction; G: Wholesale and retail trade; repair of motor vehicles and motorcycles; H: Transportation and storage; I: Accommodation and food service activities; J: Information and communication; K: Financial and insurance activities; L: Real estate activities; M: Professional, scientific and technical activities; N: Administrative and support service activities; O: Public administration and defence; compulsory social security; P: Education; Q: Human health and social work activities

Homeworking

Finally, the ability of homeworking emerges as a significant factor that can shape how places are impacted from the current lockdown. Tables 7-9 show the variation of homeworking across several variables. Table 7 shows that more people work from home in Information and communication (J), Real estate activities (L) and Professional, scientific and technical activities (M). If these shares are an indication of how possible it is to perform tasks from home and hence firms to continue operating, places where these sectors are prevalent are expected to mitigate some of the crisis impact.

Table 7: Homeworking by sector

	Own	Same grounds or buildings,	Separate from
Sector/Homeworking status	Home	or home as base	home
C Manufacturing	3.9	6.0	90.0
F Construction	3.8	24.3	71.5
G Wholesale, retail, repair of vehicles	3.2	4.0	92.5
H Transport and storage	1.8	9.5	88.6
I Accommodation and food services	2.1	3.5	94.1
J Information and communication	14.8	12.5	72.5
K Financial and insurance activities	5.2	5.4	89.1
L Real estate activities	12.3	12.4	75.1
M Prof, scientific, technical activ.	12.8	13.5	73.6
N Admin and support services	5.6	16.7	77.6
O Public admin and defence	2.6	3.6	93.5
P Education	2.7	5.9	91.2
Q Health and social work	3.9	4.2	91.7

Source: ONS

Table 8 shows that the propensity to work from home also differs by occupation with managerial jobs being more likely to work from home. The last column also shows the share of each occupational class in the WMCA. Lower than average shares in occupations with high probability of homeworking mean that WMCA could experience worse impact than other places.

Table 8: Homeworking by occupational class

Occupational		Same grounds	Separate	Share of	Share of occupational
class/Homeworking	Own	or buildings, or	from	occupational	class in
status	Home	home as base	home	class in UK	WMCA
SOC 1	10.0	12.7	77.3	10.8	8.6
SOC 2	5.8	7.6	86.5	20.7	19.1
SOC 3	8.1	11.3	80.4	14.6	13
SOC 4	6.9	2.1	90.8	10.1	10.2
SOC 5	2.4	22.1	75.2	10.1	9.9
SOC 6	4.5	6.0	89.2	9	9.3
SOC 7	1.6	2.1	96.1	7.5	7.6
SOC 8	1.2	10.1	88.5	6.4	9.4

SOC 9	0.5	5.6	93.6	10.4	12.3

Source: Author's elaboration from ONS data. SOC 2010 - 1: managers, directors and senior officials; 2: professional occupations; 3: associate prof & tech occupations; 4: administrative and secretarial occupations; 5: skilled trades occupations; 6: caring, leisure and other service occupations; 7: sales and customer service occupations; 8: process, plant and machine operatives; 9: elementary occupations

Finally, homeworking also differs in space with some regions more probable to have employees working from home (Table 9). West Midlands is lower than average and this echoes the expected impact of homeworking seen so far. At the moment of writing, data by local authority is unavailable without access to microdata but <u>evidence</u> suggests that Sandwell is one of the areas with the smallest shares of homeworkers in the country.

Table 9: Homeworking by region

		Same grounds or	
Government Office		buildings, or home	Separate
Region/Homeworking status	Own Home	as base	from home
North East	3.5	7.0	89.3
North West	4.2	8.1	87.4
Yorkshire and The Humber	4.6	8.9	86.1
East Midlands	4.4	9.6	85.7
West Midlands	4.3	8.6	86.8
East of England	5.5	8.5	85.7
London	5.5	9.4	84.6
South East	6.8	10.8	82.1
South West	6.4	11.9	81.4
Wales	4.4	9.6	85.6
Scotland	4.0	6.2	89.6
Northern Ireland	3.8	5.6	90.0
UK	5.1	9.1	85.5

Source: ONS

Overall, it is too early to estimate the effects of the COVID-19 disruption to the economy with any degree of certainty. What is widely expected, is that despite the global nature of the shock, local responses will likely differ. This will be due to local differences in the presence of previously identified resilience determinants such as stocks of human capital, as well as to differences in factors that are particular to this crisis such as the ability of homeworking, the characterisation of businesses in essential and non-essential and the length of the lockdown. The realisation that this crisis will be mitigated by brave and unprecedented fiscal measures rather than austerity, is reason for cautious optimism. However, it is important for these measures to come strong and come soon and also recognise the spatial variation of the crisis.

Stay safe, stay in.

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