## **Warwick Think Tank**



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### Introduction

Regional Inequalities in nations is both not new nor unique. In most if not all states you can find plenty of metrics where one area might be doing significantly worse than another. In the United Kingdom we have the North-South divide features regularly in the press and political discourse; The Golden Horseshoe in Canada; Italy's Mezzogiorno and finally Urban-Rural divides in developing nations such as China and India, However, the Rust Belt is considerably the most intriguing because of the historical precedence in one of the largest economies in the world. The Rust Belt, situated in the north-western United States, encompasses states such as New York, Michigan, Pennsylvania, Virginia, and Ohio. Flourishing in the 20th century, the region was a thriving hub, particularly due to the presence of prominent automobile and steel industries that extensively employed the local populace. However, with the nation's transition from a manufacturing-oriented economy to a tertiary one, numerous factories within the Rust Belt ceased operations. resulting in widespread unemployment. Consequently, the economic trajectory of the region underwent a gradual decline, followed by a concurrent fall across various metrics measuring the quality of life within the area. Despite government efforts to mitigate the challenges faced by the Rust Belt, the region has not fully recovered.

The focus of this term's report centres on an exploration of the economic challenges confronted by a specific locale and considering that - in the context of the US presidential elections - candidates will be using their policies for the rust belt to consolidate support, the issue is extremely relevant. We will first outline the decline of the Rust Belt in the briefing then explore the reasons for the decline in the insight section, before ultimately suggesting policies which could help revitalise the socioeconomic state of the Rust Belt.

### **Briefing**

### Long-term community decline:

### Housing value in the Rust Belt cities have declined substantially over the past years.

- Suburban houses lost as much as 75% of their value in postindustrial Ohio.<sup>1</sup>
- In 49 Rust Belt cities, a minimum of 269 census tracts experienced a reduction of over 50% in their housing units from 1970 to 2010. In contrast, no Canadian city had a single tract with such housing unit loss, despite possessing comparable economies.<sup>2</sup>
- Affordability conditions in Rust Belt regions have witnessed a decline of more than 35%.<sup>3</sup>

## Once-Thriving Cities are now both empty, derelict and unlivable as populations have plummeted in the core Rust Belt cities.

- Between 1990 and 2010, Youngstown experienced a 30 percent decline in its population, marking the most significant population drop among cities with 50,000 or more residents from 2010 to 2012. The departure of substantial portions of the middle class left the city grappling with disproportionately high levels of poverty and violent crime.<sup>4</sup>
- Many of the Rust Belt states are experiencing the lowest population growth rates in the country. Illinois is even experiencing a *fall in its population*, a fall of 2.52% since 2010.<sup>5</sup>
- Once the fourth-most-populated city in the United States, Detroit reached its peak
  with 1.8 million residents, a number that dwindled to 673,000 by 2018. The city
  experienced the downturn in its fortunes as the once-thriving automotive industry
  started declining in the 1960s, resulting in a consistent population decline over the
  past five decades.<sup>6</sup>

<sup>&</sup>lt;sup>1</sup> McQuarrie, M., 2016, From Solidarity to Trump: White Working-Class Culture in the Rust Belt

<sup>&</sup>lt;sup>2</sup> Hackworth, J., 2023, Neighbourhood Abandonment in the American Rust Belt

<sup>&</sup>lt;sup>3</sup> Wedlake, N., 2023, <u>How Have Rising Rates Impacted Supply, Demand and Affordability?</u>

<sup>&</sup>lt;sup>4</sup> Florida, R., 2017, Why Rust Belt Natives are Coming Home

<sup>&</sup>lt;sup>5</sup> World Population Review, 2024, <u>US States - Ranked by Population</u>

<sup>&</sup>lt;sup>6</sup> World Population Review, 2024, Rust Belt Cities 2024

 Studies focusing on Chicago and Pittsburgh, for instance, have observed the phenomenon of "middle-class flight" from the inner city. Additionally, Hartley in 2-13 discovered a 45 percent decline in population for Buffalo, Cleveland, Detroit, and Pittsburgh from 1970 to 2006. Moreover, these cities encountered a substantial decrease in average household incomes over the 36-year period.<sup>7</sup>

## Urban Settlements in the Rust Belt are now attempting to grapple with soaring drug problems and economic ruin.

- Out of 14 Rust Belt towns in six states surveyed by The Associated Press, all with populations of 30,000 or less, drug-related arrests have more than doubled in the past 15 to 20 years. Notably, this trend persists despite a decline in the number of residents in every community.<sup>8</sup>
- Many states in the Rust Belt are the hardest hit in the ongoing Opioid Epidemic in the United States. West Virginia has the highest drug overdose mortality in the United States, with a death rate of 90.9 per 100,000 people.<sup>9</sup>
- A 2017 study by the Pennsylvania Economy League confirms the accelerating fiscal stress on municipalities in that state. This financial distress threatens the ability of municipalities to provide essential services like safe communities and court systems.<sup>10</sup>
- Over the past years, for certain areas in the Rust Belt, the murder rate has long been above average of the US. Especially industrial cities in the Midwest and Northeast, like St. Louis, Cleveland and Pittsburgh have all seen relatively high homicide rates over some time. Richard Rosenfeld, emeritus professor of criminology at the University of Missouri, St. Louis says this is "clearly related to economic decline and the inability of some of those cities to climb back from deindustrialisation."

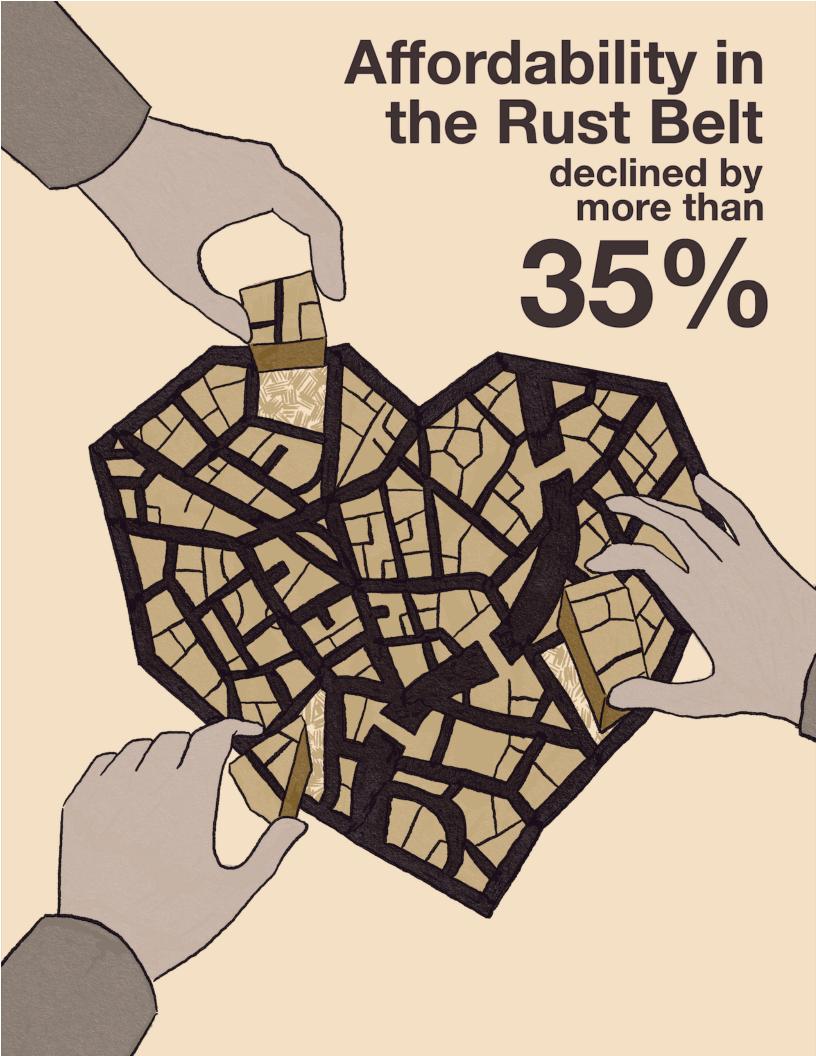
<sup>&</sup>lt;sup>7</sup> Kaida et al., 2020, <u>Can Rust Belt or Three Cities Explain the Sociospatial Changes in Atlantic Canadian</u> Cities?

<sup>&</sup>lt;sup>8</sup> Plushnick, R.M., 2008, <u>In the Rust Belt, Drugs Moved In as Steel Moved Out; the Dealers are the Ones in n Flashy SUVs</u>

<sup>&</sup>lt;sup>9</sup> Centre for Disease Control and Prevention, 2021, <u>Age Adjusted Drug Overdose Death Rates</u>

<sup>&</sup>lt;sup>10</sup> Pennsylvania Economy League, 2017, <u>Communities in Crisis: The Truth and Consequences of Municipal Fiscal Distress in Pennsylvania 1970 to 2014</u>

<sup>&</sup>lt;sup>11</sup> The New York Times, 2018, Why are Murder Rates So High in the Rust Belt?



### **Decline in Employment:**

## The Rust Belt has lost a number of industries and a significant amount of jobs in the last few decades.

- The level of employment in the Rust Belt as a fraction of total US employment has decreased significantly since the end of World War II with aggregate employment in the Rust Belt as a fraction of US employment going from 43% in 1950 to 27% in 2000.<sup>12</sup>
- There has been a significant decrease in the employment rate in manufacturing employment and steel, auto and rubber employment with decreases of 18% and 20% in the sectoral employment in the Rust Belt as a fraction of the sectoral employment in the US in the respective industries<sup>13</sup>.
- The trend continues beyond just the turn of the 20th century as between 2000 and 2010, manufacturing employment dropped by 35% in the Rust Belt leading to the elimination of 1.6 million jobs, a sharper decrease in employment than that during the Great Depression.<sup>14</sup>

## Once job loss occurs and the opportunity for employment disappears, areas face complete economic and social collapse.

- The decrease in aggregate employment in the rust belt has also impacted the average wage levels. Relative wage levels in the Rust Belt (i.e. wages as a factor of the US average) have fallen from 110% to 105% between 1950 and 2000.<sup>15</sup>
- There is also a marked increase in the poverty rates of 2015 when compared to that in 1970 with an average of a 45.02% increase in poverty across all Rust Belt states. This includes increases of 77% and 58.8% in the states of Michigan and Indiana respectively.<sup>16</sup>
- Monessen, Pennsylvania is an example of what happens when jobs cease to exist.
   When Monessen lost its steel mills in the 1990s, it led to: dereliction, two thirds of the population leaving and one elementary school remaining (from nine).<sup>17</sup>

<sup>&</sup>lt;sup>12</sup> Alder et al., 2014, The Decline of the US Rust Belt: A Macroeconomic Analysis

<sup>&</sup>lt;sup>13</sup> Ibid.

<sup>&</sup>lt;sup>14</sup> Austin and Kazis, 2018, Rebuilding the Employment Security System for the Rust Belt that Created It

<sup>&</sup>lt;sup>15</sup> Alder et al., 2014, The Decline of the US Rust Belt: A Macroeconomic Analysis

<sup>&</sup>lt;sup>16</sup> Eide, S., 2017, Rust Belt Cities and their Burden of Legacy Costs

<sup>&</sup>lt;sup>17</sup> Collins, M., 2019, The Abandonment of Small Cities in the Rust Belt

### The change in the predominant industries leave major risks for further downtowns in the future.

- After the decline of the manufacturing industry which made up for approximately a third of the employment in the Rust Belt, educational and healthcare services became the next primary source of employment.
- As of 2015, The 'Eds and Meds' made up for a quarter of the employment in most cities by 2015 including 33% in Pittsburg and 26.4% in New York City.<sup>18</sup>
- There are, however, concerns, with a dependence on the 'Eds and Meds' industries. Many of the companies in these industries such as universities, hospitals and pharmaceutical companies tend to be non-profit organisations which exempts them from tax responsibilities. Therefore municipalities of regions which depend on these industries for employment often have low tax revenue and, by extension, lower fiscal budgets.<sup>19</sup>

<sup>&</sup>lt;sup>18</sup> Eide, S., 2017, Rust Belt Cities and their Burden of Legacy Costs

<sup>&</sup>lt;sup>19</sup> Renn, A.M., 2012, <u>The End of the Road for Eds and Meds</u>

### **Poor Welfare and Quality of Life:**

## There is a major health crisis in the Rust Belt, reflecting in many important indicators being unacceptable for any country.

- A large proportion of blame for the decline in average American life expectancy can be attributed to the Rust Belt. With a relative increase of 11.6% in Illinois, Indiana, Michigan, Wisconsin and Ohio compared to 6% across the whole United States.<sup>20</sup>
- According to the Sharecare Community Well Being Index score: all rust belt states apart from Wisconsin have experienced a fall in well-being after the COVID-19 Pandemic. With Indiana, Missouri, Ohio, and West Virginia in the worst performing 40% of states.<sup>21</sup>
- Rust Belt states are some of the most unhealthy states in America. Michigan ranks the 14th worst, Indiana the 10th worst and Ohio the 9th worst. West Virginia, however, is the most unhealthy state in America. With worrying indicators such as having the highest percentage of adults who smoke and are obese (21% and 41% respectively).<sup>22</sup>

## While the Rust Belt is finding some success in higher education, its provision for basic education leaves a lot to be desired.

- West Virginia is the least educated state in America. It is the worst state in the country for the number of people with associate degrees (falls between high school and a bachelor degree) and bachelors degrees, at 20.6%.<sup>23</sup>
- West Virginia fares just as bad when looking at Pprimary education. There has been a decline in 8th graders ability in being both proficient at reading and maths.
   With 22% of 8th graders being proficient at reading and 15% being proficient at maths.<sup>24</sup>
- When looking at the National Assessment of Educational Progress, which
  measures reading and mathematical ability at Grades 4 and 8. We can see that
  children in Rust Belt states are defined as "basic" with only partial mastery of
  fundamental skills.

<sup>&</sup>lt;sup>20</sup> Woolf, S.H., 2019, Decrease in Life Expectancy Concentrated in the Rust Belt and Appalachia

<sup>&</sup>lt;sup>21</sup> Sharecare Community Well-Being Index, 2022, <u>Sharecare Community Well-Being Index 2022 state</u> rankings report

<sup>&</sup>lt;sup>22</sup> Bailie and Horton, 2024, States With The Least Healthy (And Healthiest) Populations, Ranked

<sup>&</sup>lt;sup>23</sup> World Population Review, 2024, Least Educated States 2024

<sup>&</sup>lt;sup>24</sup> Mervosh, S., 2023, Who Runs the Best U.S. Schools? It May Be the Defense Department

## The Rust Belt is experiencing significant racial tensions: Although the Rust Belt is becoming more diverse, this has resulted in more segregation and racism.

- The states that contain the rust belt have some of the largest growing "minority populations" in the United States.<sup>25</sup> According to the 2020 US Census, Illinois has experienced a 14.3% decline in people classified as "white alone" since 2010.<sup>26</sup>
- Cities in the Rust Belt remain the most racially segregated in America. The most populous city in Wisconsin, Milwaukee, is the most racially segregated city in the country.<sup>27</sup> 78% of the city's African American and White populations would need to move in order to achieve equal distribution in all neighbourhoods.
- Major states in the Rust Belt are in the process of declaring Racism a 'public health crisis'. Wisconsin was the first state to declare racism a public health crisis in 2018.<sup>28</sup> By February 2022, there were at least 27 counties and cities in Ohio that declared racism a public health crisis.<sup>29</sup>

<sup>&</sup>lt;sup>25</sup> Devadoss, C., 2023, <u>Examining Rust Belt narratives: Race, rural representation, and everyday</u> experiences

<sup>&</sup>lt;sup>26</sup> United States Census Bureau, 2021, <u>Race and Ethnicity in the United States: 2010 Census and 2020 Census</u>

<sup>&</sup>lt;sup>27</sup> Wilson, R., 2022, America is diversifying, but Rust Belt cities lag

<sup>&</sup>lt;sup>28</sup> American Public Health Association, 2021, <u>Analysis: Declarations of Racism as a Public Health Crisis</u>

<sup>&</sup>lt;sup>29</sup> Huntsman, A., 2022, <u>Numerous Ohio cities declare racism a public health crisis, but does it mean anything?</u>



# Poor Welfare &





# Quality of Life



# Insights

### **Overview**

This section dives into the complex reasons behind the decline of the Rust Belt, a region in the United States that was once an industrial powerhouse. It will explore three key themes:

Lack of Government Care: It will examine how government policies and investment haven't been enough to revitalise the Rust Belt. We'll see how dependence on private investment can be risky and how the region lacks the resources to fund its own improvements.

Decline in Manufacturing: It will utilise an analysis on how the decrease in manufacturing jobs, due to factors like globalisation and reduced worker bargaining power, has significantly impacted the Rust Belt's economy.

Population Loss: It will explore how a drop in population, caused by factors like poor housing conditions, lack of jobs, and crime, has created a vicious cycle that further weakens the region's economy and quality of life. By understanding these themes, a clearer picture can be gained of the challenges the Rust Belt faces and why it struggles to recapture its former glory.



#### A Lack of Government Care.

Biden's CHIPS and Science Act in 2022, saw an influx of \$280 billion of investment into the US economy. However, some areas are not gaining the potential benefits of this investment or in the same cases it is not enough. Biden's CHIPS act never explicitly states or gives any federal involvement, the main details of the act were a \$50 billion investment for American semiconductor manufacturing and a 25% tax credit for American Chip Manufacturers. As a result, the success of investment in Rust Belt states is solely dependent on the private sector. While there are some remarkable success stories, private investment also carries substantial risks for communities. As they have less constraints and pressure to pull stalled projects. For example, a \$1.6 billion steel factory in Kentucky wasn't built when Baridy Industries failed to raise money and major investors such as Rusal pulled out.

More targeted investment is needed, and in order for this to happen, federal involvement is necessary. While technology sector jobs are spreading out, *this trend is not occurring in the Rust Belt,* which needs this investment the most.<sup>32</sup> Compared to other "Rust Belts" in the world, like Germany's Rhur and England's North, the US Rust Belt have fared relatively worse compared to their peers.<sup>33</sup> Since the 1970s, only 17% of Rust Belt hubs have experienced employment growth faster than the national average. This is because of the Rust Belt's poor regional performance in terms of labour force education. The main reason for this was the lack of human capital, a better educated labour-force can attract employers in the tertiary sector, offsetting job losses and permanent unemployment.

It is also clear that the money and investment required for the CHIPS and Science act to be successful has stalled.<sup>34</sup> Biden's recent budget requests for the fiscal year of 2024 have failed to deliver on the spending targets promised when the act was announced in 2022. Currently, there is a \$3 billion gap for research and less than 10% of the five-year funding plan has been provided. This trend of unanswered rhetoric continues into the previous administration as well. Trump's flagship 'Infrastructure Investment Program' offered \$100 Billion of Investment for America's crumbling infrastructure.<sup>35</sup> However, the

<sup>&</sup>lt;sup>30</sup> Starr, S., 2023, <u>US tech investment sparks dreams of Rust Belt economic revival – but results are</u> uneven

<sup>31</sup> Katko et al., 2023, Biden administration, states need to step up efforts to maximize CHIPS Act

<sup>&</sup>lt;sup>32</sup> McGahey, R., 2023, <u>Tech Jobs Won't Revive The Rust Belt Without Federal Help</u>

<sup>&</sup>lt;sup>33</sup> Gagliardi et al., 2023, <u>The World's Rust Belts: The Heterogeneous Effects of Deindustrialization on 1,993 Cities in Six Countries</u>

<sup>&</sup>lt;sup>34</sup> Hourihan et al., 2023, The bold vision of the CHIPS and Science Act isn't getting the funding it needs

<sup>&</sup>lt;sup>35</sup> Austin, J.C., 2018, <u>A Rust Belt rebuild can't rest on locals</u>

catch was that federal involvement was capped at 20%, so state governments had to make up the rest. This is something that state's in the Rust Belt states simply cannot afford to do.

In addition, many of the Rust Belt states lack the necessary credit ratings needed in order to fund the (expensive) projects to improve welfare and quality of life. In 2016, the then Governor of Utah proclaimed: "AAA is the best you can get, and here in Utah we won't settle for anything less". Having a good credit rating is of utmost importance, it essentially determines the cost of borrowing for a state government. The higher the credit rating, the lower the cost of repaying bonds. This ultimately feeds through the citizens in the form of taxes and public service provision.

In the most recent S&P Credit Ratings, Illinois had the lowest rating of A-, Pennsylvania had a slightly higher rating of A+ and West Virginia had a rating of AA+.<sup>38</sup> Anything below the best rating of AAA may look minor, but when states borrow and spend billions of dollars each year, even *the smallest* changes can have multibillion dollar impacts on their budget plans.<sup>39</sup> In the Illinois case, this has resulted in the Illinois budget this year contributing \$450 million to pay off Railsplitter Authority Bonded Debt.<sup>40</sup> With poor borrowing rates, it is likely that Illinois' spending will have to be cut if state revenues fall in the next fiscal year.<sup>41</sup> Harming vital public services such as education and health which are necessary for a successful revival. Poor handling of state budgets is a major detriment to Rust Belt revitalisation. State Governments are responsible for all local spending, debt and taxes.<sup>42</sup> It is impossible for any area, urban or rural, to function if debts are not paid and basic services are non-existent.

The Rust Belt may never return to its former glory, but the current state many of these communities currently live in is unacceptable relative to the rest of the United States. One of the reasons that these states are now referred to as the Rust Belt is because of poor federal and state policies. Beneficial government involvement through policy and investment will reverse these trends.

<sup>&</sup>lt;sup>36</sup> C-SPAN, 2016, <u>Utah State of the State Address</u>

<sup>&</sup>lt;sup>37</sup> The PEW Charitable Trusts, 2017, Rainy Day Funds and State Credit Ratings

<sup>&</sup>lt;sup>38</sup> S&P Global Ratings, 2024, <u>U.S. State Ratings And Outlooks: Current List</u>

<sup>&</sup>lt;sup>39</sup> Comptroller. Texas. Gov, 2015, Texas and the Credit Rating Agencies

<sup>&</sup>lt;sup>40</sup> Illinois.Gov, 2023, Gov. Pritzker Signs Fifth Balanced Budget

<sup>&</sup>lt;sup>41</sup> Miller, R., 2023, Illinois is due for some budget belt-tightening

<sup>&</sup>lt;sup>42</sup> Eide, S., 2017, To Revitalize Rust Belt Cities, First Stablize their Budgets

#### Decreasing competition and a loss of workers' bargaining power.

One of the primary drivers of employment decline in the Rust Belt is the lower competition in both labour and output markets within the Rust Belt. The Rust Belt was the most unionised region in the United States. These unions employed the tactic of threatening strikes to secure increased payments from companies. In the steel industry, for instance, in each of the ten years post-World War II, unionised steel workers insisted on wage and benefit hikes, designating a specific strike date in case their employer's response failed to meet the union's satisfaction. Consequently, it is unsurprising that during this period. Rust Belt workers earned wages significantly above the national average. Workers' and unions' bargaining power was also reflected in the amount of work stoppages over time with an average of approximately 350 annual stoppages that affected more than a thousand workers in the post-war period between the early 1950s and late 1970s.<sup>43</sup> This figure then declined to less than 50<sup>44</sup> in the years post 1985 due to, among other reasons, increasing globalisation which made it possible to outsource jobs and the Reagan administration's anti-union stance which included policies such as the 'Right to Work Laws' and the handling 'Air Traffic Controllers' Strike incident wherein the government laid off 11,000 workers for going on strike.<sup>45</sup> Although regional breakdowns of these statistics are unavailable, it is plausible that a majority of these strikes took place in the Rust Belt, given that influential unions like the USW and UAW had extensive operations in that area.46

The decades following World War II witnessed a notable concentration of power in key industries within the Rust Belt. The steel industry was largely controlled by three major companies – U.S. Steel, Bethlehem Steel, and National Steel – collectively holding nearly all U.S. market share post-WWII and maintaining at least half of domestic capacity until 1980. Similarly, the automobile sector was heavily influenced by the "Big Three" car companies – General Motors, Ford, and Chrysler – which commanded 90 percent of automobile sales in the United States in 1958 and maintained a market share of at least 75 percent until around 1980.<sup>47</sup> The rubber tire industry exhibited a parallel concentration,

<sup>&</sup>lt;sup>43</sup> Alder et al., 2014, Competitive Pressure and the Decline of the Rust Belt: A Macroeconomic Analysis

<sup>44</sup> Ihid

<sup>&</sup>lt;sup>45</sup> Craig, B., n.a., Reagan vs Air Traffic Controllers

<sup>&</sup>lt;sup>46</sup> Tiffany, P.A., 1988, The Decline of American Steel

<sup>&</sup>lt;sup>47</sup> Klier, T.H., 2009, From Tail Fins to Hybrids: How Detroit Lost its Dominance of the U.S. Auto Market

with four major players – Goodyear, Firestone, U.S. Rubber, and Goodrich – collectively controlling a minimum of 90 percent of the market from 1950 to 1970.<sup>48</sup>

Within these industries, it is widely acknowledged that the major firms faced minimal competitive pressure and wielded significant market power. Steel producers had consolidated their monopolistic control in the industry, resulting in a well-established system of price leadership and follower-ship, with U.S. Steel emerging as the predominant force in setting prices.<sup>49</sup> The landscape of the automobile industry was similar to a corporate oligopoly throughout the 1950s, 1960s, and 1970s, with General Motors assuming the role of the price leader.<sup>50</sup>

This consolidation of market control contributed to a lack of competitive dynamics within these industries, allowing the dominant firms to exercise significant influence over pricing and market trends. However, it also set the stage for challenges when these industries faced external pressures, such as globalisation and technological changes, which required adaptability and competitiveness that the established structures struggled to achieve. The dominance of a few major players, while providing stability in certain periods, ultimately posed challenges as economic landscapes evolved.

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<sup>&</sup>lt;sup>48</sup> Alder et al., 2014, Competitive Pressure and the Decline of the Rust Belt: A Macroeconomic Analysis

<sup>&</sup>lt;sup>49</sup> Bursler, N., 1995, The Structure of American Industry

<sup>&</sup>lt;sup>50</sup> Alder et al., 2014, Competitive Pressure and the Decline of the Rust Belt: A Macroeconomic Analysis

#### Decline in Population.

A considerable number of individuals residing in the Rust Belt have relocated, resulting in a depopulation that imbues the region with an aura of abandonment. This desolate ambiance encapsulates the decline of the area, as the absence of inhabitants and the cultural decay contribute to a dire economic condition. The decline in population in the Rust Belt is an important cause for the declining economy and deteriorating lifestyle of the region. The fall in population can be attributed to various factors including a decline in housing conditions, a lack of employment opportunities and increasing crime- all of which resulted in native Rust Belt residents migrating out of the region.

The real estate sector in Detroit contributes little to the regional economy with the median housing price being \$80,000<sup>51</sup> much lower than the national median housing price of \$387,600.<sup>52</sup> Some houses in Detroit are valued at rates as low as \$10,000, but with owners having to pay property taxes upwards of \$3,000, owning a house seems implausible.<sup>53</sup> Another reason contributing to the abandonment of houses is an increase in property taxes. Low wages resulted in increasing mortgage default rates and ultimately leading to people abandoning their homes. The quality of housing has also decreased due to abandonment; with up to 31,000 abandoned houses in places such as the Detroit metropolitan area, many neighbourhoods are deserted which discourages prospective home-owners from moving into the city, exacerbating the population crisis.<sup>54</sup>

The decline in the quality of life in Rust Belt cities further contributes to the population decline; natives of the region prefer living in safer, cleaner areas and hence shift to other regions in the United States such as the 'Sun Belt'. 55 Many rust belt cities are experiencing higher drug usage rates despite falling populations, which not only worsens residential communities, but also reduces worker productivity in the region. This creates a vicious cycle of falling productivity leading to greater layoffs and higher unemployment, which then pushes people into crime and drugs, restarting the cycle.

Another reason explaining the falling population in the Rust Belt is the migration of workers from the Rust Belt to the 'Sun Belt'- a region in the southwest of America offering lower housing prices, warmer climates and jobs in manufacturing and service sectors

<sup>&</sup>lt;sup>51</sup> Zillow, 2024, <u>Detroit Home Prices</u>

<sup>&</sup>lt;sup>52</sup> Bankrate, 2024, Median Home Prices in Every State

<sup>&</sup>lt;sup>53</sup> Hackworth, J., 2023, Neighbourhood Abandonment in the American Rust Belt

<sup>&</sup>lt;sup>54</sup> Brooky, K., 2019, Abandoned Detroit

<sup>&</sup>lt;sup>55</sup> Glaeser, E.L., 2007, <u>The Rise of the Sunbelt</u>

such as aerospace, technology and oil.<sup>56</sup> The Sun Belt has reported population and income increases- making up 27% of all US income in 1950 to 33% in 2000.

The Rust Belt's pronounced depopulation emerges as a pivotal factor contributing to its overall socio-economic decline. The region's desolate ambiance, marked by abandoned houses and deserted neighbourhoods, mirrors the adverse consequences of population flight. Housing deterioration, limited employment opportunities, and escalating crime rates have collectively compelled native residents to seek alternative living conditions outside the Rust Belt. Detroit, a prominent emblem of the Rust Belt, exemplifies these challenges with a real estate sector contributing minimally to the regional economy. The burgeoning disparity in housing prices, coupled with the burden of high property taxes, renders homeownership unattainable for many. Furthermore, the prevalence of abandoned houses exacerbates the population crisis, dissuading potential residents and perpetuating a cycle of decline. The decline in the quality of life in Rust Belt cities, coupled with safety concerns and increased drug usage, further propels the population's migration. Residents, in pursuit of safer and cleaner environments, gravitate toward regions like the 'Sun Belt.' This migration exacerbates the Rust Belt's economic challenges, as the loss of skilled workers contributes to a self-perpetuating cycle of declining productivity, heightened unemployment, and increased crime. The Sun Belt's appeal, characterised by lower housing costs, favourable climates, and diverse job opportunities, underscores the Rust Belt's struggle to retain its population and revitalise its economic prospects. Ultimately, the migration patterns from the Rust Belt to the Sun Belt stand as a multifaceted phenomenon with far-reaching implications for the socio-economic landscape of both regions.

<sup>&</sup>lt;sup>56</sup> Clarion Partners, 2019, The Rise of the U.S. Sun Belt

#### **Insight Conclusion:**

The economic decline of the Rust Belt region is a complex, multifaceted issue driven by various interconnected factors. A lack of government investment and supportive policies, both at the federal and state levels, has left many Rust Belt communities struggling. Despite efforts like the CHIPS Act, funding gaps and unrealized promises have hindered meaningful revitalisation. The concentration of power and market dominance by a few major players in key Rust Belt industries, such as steel and automotive, initially provided stability but ultimately left these industries ill-prepared to adapt to globalisation and technological changes. The erosion of workers' bargaining power through declining unionisation further exacerbated economic challenges. Moreover, the Rust Belt's pronounced population decline, driven by factors like deteriorating housing conditions, limited employment opportunities, and rising crime rates, has created a vicious cycle of economic decay. As residents migrate to more prosperous regions like the Sun Belt, the loss of human capital and skilled workers compounds the Rust Belt's socio economic woes. A successful revitalisation effort will require a comprehensive strategy that addresses all the aforementioned themes.

## Policy Recommendations

### **Overview**

The aim of this set of recommendations is to provide a comprehensive strategy for revitalising and transforming the "Rust Belt" region of the United States into a thriving economic hub. The approach taken involves a combination of targeted federal investments in key industries, such as semiconductors and high-tech manufacturing, as well as a focus on supporting and enhancing higher education and medical institutions. The recommendations draw inspiration from successful urban regeneration projects worldwide, particularly the transformation of the London Docklands into a major financial centre. The expectation is that these policies will not only attract significant investments and create thousands of high-paying jobs in the region but also foster a culture of innovation, entrepreneurship, and intellectual capital. By leveraging the region's existing strengths and resources, these recommendations aim to catalyse a self-sustaining cycle of economic growth, talent attraction, and overall prosperity. However, the implementation of these recommendations must also prioritise affordable housing and mitigate the potential negative impacts of gentrification on local communities.

### Action 1: Greater Targeted Federal Involvement in Industries that Matter.

It is clear for the Rust Belt as a whole to evolve, the federal government needs to have greater involvement with funds and investments. For example, take the investment in semiconductor factories: "A semiconductor factory is not like other factories. Building this semiconductor mega-site is akin to building a small city...".57 As a result, Intel's new \$20 billion microchip plant will provide huge benefits for the local economy, 7,000 new jobs will be created from just building the factories themselves,58 with a total payroll of \$405 million dollars created.59 Schools, hospitals, housing and infrastructure will have to be built to help sustain the influx of workers. Due to investments like these in the Columbus region, their population has grown by half a million people between the years 2000 and 2021.60 Leading to arguments that Columbus is potentially losing its tag of being in the Rust Belt.

Micron, a semiconductor chip manufacturer based in Idaho, is investing \$100 billion for new chip factories in Syracuse. In addition to the 9,000 jobs created in the factories, an additional 41,000 jobs will be created in other businesses. This will in turn lead to increases in students enrolled in vocational schools and universities to work these high skilled jobs, Syracuse University has responded to these developments by increasing undergraduate enrollment in its College of Engineering and Computer Science by 50% in its latest Academic Strategy Plan. On average, a semiconductor engineer earns \$98,091 per year in the United States. Hose high disposable incomes will help develop supporting industries and businesses in the surrounding area through the "multiplier effect". However, states have to walk a very fine line in terms of tax-payers money. New York State provided \$5.5 billion dollars in tax breaks to build the Micron chip factory. There has to be detailed and effective cost-benefit analysis to ensure that the money is not better spent on its citizens at the moment.

<sup>&</sup>lt;sup>57</sup> Arend, M., 2022, The 'Rust Belt' No More

<sup>&</sup>lt;sup>58</sup> Fedor, L., 2023, Ohio's rustbelt turns into a magnet for chip fabs

<sup>&</sup>lt;sup>59</sup> JLL, 2023, <u>3 reasons why Columbus is officially out of the Rust Belt</u>

<sup>&</sup>lt;sup>60</sup> McKinsey, 2023, Sustainable, inclusive housing growth: A case study on Columbus, Ohio

<sup>&</sup>lt;sup>61</sup> Dodge, J., 2023, My Hometown Is Getting a \$100 Billion Dose of Bidenomics

<sup>&</sup>lt;sup>62</sup> Rotman, D., 2023, <u>The \$100 billion bet that a postindustrial US city can reinvent itself as a high-tech hub</u>

<sup>63</sup> Bolduc and Wright, 2024, Breaking down the next 5 years of SU's Academic Strategic Plan

<sup>&</sup>lt;sup>64</sup> Indeed, 2024, <u>Semiconductor Engineer Salaries</u>

<sup>&</sup>lt;sup>65</sup> Cohn, S., 2023, <u>States are paying huge sums to lure semiconductor manufacturers, on top of CHIPS Act billions</u>

If Biden wants to truly: "bury the label 'Rust Belt' and call it, ..., the 'Silicon Heartland'." 66 Then the Federal Government has to continue to support investment in not just high-tech industries such as semiconductors, but also higher education and medicine. Higher education, in the form of universities, has positive impacts such as higher wages for all and higher productivity.<sup>67</sup> The city of Pittsburg is an excellent example of how this is possible, the events of which have helped coined the phrase: "From rust belt to brain belt". The creation of the robotics institute at the university, the emergence of the robotics clusters and a culture of entrepreneurship has developed Pittsburg into an area Google, Uber and Ford feel compelled to move into.<sup>68</sup> The success in these brain belt cities can be owed to when universities cooperate with business and local governments.<sup>69</sup> So just imagine what would happen when the Federal Government, with a much larger budget gets involved. This in turn will also help to sustain continued investment into the region, as many of these projects have decade long timeframes. Micron's investment in Syracuse will take over 20 years to finish its megafab plant, 70 meaning that development has to be continuous and not just one singular windfall payment. Greater investment in higher education, specifically computer science, complements the growing number of high-tech investments, but also provides benefits of its own: A 10% increase in the number of universities is associated with over 0.4% higher economic growth per capita in the region.<sup>71</sup> In the words of Patrick Moniyhan:"If you want to create a great city, create a university and wait 200 years". 72 Although for the sake of the rust belt cities, it has to be a lot sooner than two centuries.

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<sup>&</sup>lt;sup>66</sup> The White House, 2022, <u>Remarks by President Biden on Rebuilding American Manufacturing Through the CHIPS and Science Act</u>

<sup>&</sup>lt;sup>67</sup> Smith, N., 2018, <u>How Universities Make Cities Great</u>

<sup>&</sup>lt;sup>68</sup> Katz and Nowak, 2018, <u>How the Once-Struggling Pittsburgh Is Reinventing Itself as an Innovation Hub</u>

<sup>&</sup>lt;sup>69</sup> Dodd, T., 2017, From rust belt to brain belt: how to revive a dying industrial region

<sup>&</sup>lt;sup>70</sup> Micron, 2022, Micron Announces Historic Investment of up to \$100 Billion to Build Megafab in Central New York

<sup>&</sup>lt;sup>71</sup> Evans, D.J., 2022, <u>The huge economic impact of universities</u>

<sup>&</sup>lt;sup>72</sup> Davis, G., 2017, <u>Professor Glyn Davis Full Speech: "An irredeemable time? The rising tide of hostility toward universities"</u>

### Action 2: Take Hints from Regeneration Projects Around the World.

Although Detroit's fall from grace is truly spectacular in scale, it is not the only major urban area in the world to suffer a similar fate. In the UK, this has been experienced in areas such as the docklands in East London and Bristol Harbourside. The London Dockyards are especially comparable with the current state of Detroit: The population of London Docklands fell by 20% between 1971 and 1981; In 1981, 60% of the area was derelict, vacant or under-used and the unemployment rate was 17.8%.<sup>73</sup> Just like Detroit, the docklands were a thriving industrial area, at their busiest they employed over 100,000 people.<sup>74</sup> With items such as tobacco, grain, meat, vegetables and fruit coming from all over the empire.<sup>75</sup> And like Detroit, the loss of its comparative advantage, containerisation meant that the large ships could not use the docks,<sup>76</sup> led to mass population loss and dereliction.

However, unlike Detroit the London Dockyards have been completely regenented to the extent that it is now one of Europe's most important financial hubs,<sup>77</sup> with more than 120,000 workers travelling to Canary Wharf daily.<sup>78</sup> However, Canary Wharf and the Isle of Dogs don't just rely on the financial sector. In 2022, the area attracted 54 million people from other business sectors such as shops, bars, restaurants and parks.<sup>79</sup> The success of the regeneration of the dockyards can be owed to the creation of the London Dockyards Development Cooperation. The inner cities should attempt to turn these potential derelict areas into new enterprise zones. The LDDC scrapped land tax, training levies, planning restrictions, a 100% tax write off on capital costs and finally a 10 year tax holiday.<sup>80</sup> In addition, the LDDC undertook infrastructure works on many of the sites that it owned, providing utilities and drainage services.<sup>81</sup> This is a process that the inner cities in the Rust Belt (such as Detroit) can learn and replicate from. If done successfully, these inner city areas can be completely revitalised, with a positive multiplier effect created that can hopefully benefit the rest of these cities. However, regeneration at this scale is

<sup>&</sup>lt;sup>73</sup> UCL, 2014, <u>Jubilee Line Extension (JLE)</u>

<sup>&</sup>lt;sup>74</sup> Canal and River Trust, 2024, <u>London Docklands</u>

<sup>&</sup>lt;sup>75</sup> Royal Docks, 2018, <u>A History of the Royal Docks</u>

<sup>&</sup>lt;sup>76</sup> London Royal Docks, 2020, <u>London's Royal Docks History</u>

<sup>&</sup>lt;sup>77</sup> Jones, H., 2024, City of London remains top global financial centre in own survey

<sup>&</sup>lt;sup>78</sup> Proper Local, 2019, <u>The influence of Canary Wharf – How important is Canary Wharf to the London economy?</u>

<sup>&</sup>lt;sup>79</sup> Construction & Civil Engineering Magazine, 2023, <u>How Canary Wharf Group is continuously transforming urban spaces into extraordinary environments</u>

<sup>&</sup>lt;sup>80</sup> Financial Times, 2021, <u>Inside London's Docklands: 40 years of ambition, politics and financial wrangling</u>

<sup>&</sup>lt;sup>81</sup> British History Online, 1994, Modern Docklands: The background to redevelopment

unbelievably expensive. When the LLDC ceased to exist in 1997, it received 1.8 billion pounds of taxpayers money,<sup>82</sup> which is worth just under 9.6 billion pounds today.<sup>83</sup>

In addition, Detroit has to manage the effects of gentrification on its local population as rent prices increase. From 2017 to 2023, the average rent in Detroit increased a staggering 46.2%, from \$831 to \$1,215.84 Affordable housing has to be preserved and maintained, otherwise entire communities may disappear. Compounding their problems, being pushed to the fringes of the city leads to longer commutes and less job opportunities. This is especially relevant in the Rust Belt where displacement is more likely because of lower incomes and weak housing markets. Take Detroit for example, where the median income is half of that in the United States (\$37, 761 compared to \$75,149).85

82 The Independent, 1997, So long, Docklands ...and pounds 1.8bn

<sup>83</sup> Bank of England, 2024, Inflation calculator

<sup>&</sup>lt;sup>84</sup> Detroit Metro Times, 2023, <u>Rising costs and gentrification force locals out of Detroit's downtown and Midtown</u>

<sup>&</sup>lt;sup>85</sup> US Census, 2022, <u>United Census Bureau QuickFacts</u>

### Action 3: Implementing a 'Fat Tax'.

While the observable repercussions of the Rust Belt's decline primarily pertain to its economic implications, the decline in the quality of life warrants consideration. Compounded by challenges inherent in the United States' centralised healthcare system, which grapples with high costs, the healthcare predicament in the Rust Belt demands remedial attention.

To combat the increasing obesity in the Rust Belt region, we propose the implementation of a 'fat tax'. This will take the form of an indirect tax and will be implemented on food items which contain more than a predetermined percentage of saturated fats.

This policy mirrors the implementation of a 'sugar tax' in the United Kingdom which has been highly successful. As of November 2023, the implementation of the sugar tax in 2018- which was specifically implemented on soft drinks- has saved 5,500 children in the UK from tooth extraction surgery. <sup>86</sup> Furthermore, the implementation of the sugar tax was also related to an 8% decrease in relative obesity within girls aged 10-11 years old. <sup>87</sup> With a third of Americans eating fast food (which has high levels of saturated fats) daily, a fat tax could have large implications on the consumption of fast food by making it less affordable; and from the success of the sugar tax in the UK, it can be inferred that such a tax would have a significant 'absolute' change in fast food consumption, especially due to the high number of American residents that consume it.

The fat tax has benefits outside of just improving the life expectancy and quality of life of Rust Belt residents. States governments in the Rust Belt can make use of the tax revenue to invest in redevelopment projects such as the ones mentioned in previous sections. Furthermore, if the fat tax results in fewer cases of obesity, a large number of Rust Belt residents would reduce annual spending on healthcare. Due to the high costs of healthcare in the United States, this would mean that residents save, on average, a lot more money which they can then spend elsewhere. Consumer spending from an increase in disposable income will likely trigger the multiplier effect as local firms would experience greater profits leading to them hiring more workers, triggering an inflationary cycle of greater consumption and hiring. As the governments in the Rust Belt would continue investing in infrastructure from increasing tax revenue, more residents would move into the Rust Belt, leading to a decrease in neighbourhoods that are deserted.

<sup>&</sup>lt;sup>86</sup> University of Cambridge, 2023, <u>UK's 'sugar tax' linked to fall in child hospital admissions for tooth extractions</u>

<sup>&</sup>lt;sup>87</sup> UK Research and Innovation, 2023, <u>Sugary drinks tax may have prevented over 5,000 cases of obesity a year in year six girls alone</u>

The implementation of a fat tax in the Rust Belt yields multifaceted benefits extending beyond the enhancement of life expectancy and quality of life for its residents. The accrued tax revenue serves as a resource for state governments in the Rust Belt, for investment in redevelopment initiatives, as discussed in previous sections. Moreover, the potential reduction in obesity cases resulting from the fat tax translates into substantial savings in annual healthcare expenditures for a significant proportion of Rust Belt inhabitants.

As the Rust Belt governments continue investing tax revenue towards infrastructure development, the region becomes increasingly attractive for settlement. This influx of residents would combat the prevalence of deserted neighbourhoods, fostering a rejuvenation of urban areas. Consequently, the cyclical reinforcement of economic dynamics through increased taxation, consumer spending, and infrastructural investments contributes to the broader revitalization of the Rust Belt. This relationship between fiscal policies, public health interventions, and urban development underscores the potential for comprehensive, positive transformation within the region.

### Conclusion

To conclude, revitalising the Rust Belt region is a pressing challenge that demands innovative solutions. The main recommendations outlined in this document revolve around two key pillars: targeted federal investments in strategic industries like semiconductors and high-tech manufacturing, and a renewed focus on supporting and enhancing higher education and medical institutions.

By attracting major investments from companies like Intel and Micron, the region can leverage its existing strengths and infrastructure to create thousands of high-paying jobs, foster a culture of innovation, and spur economic growth. Complementing these investments with a robust higher education ecosystem will not only provide a skilled workforce but also drive research and development, ultimately positioning the region as a hub for cutting-edge technologies and intellectual capital.

Drawing inspiration from successful urban regeneration projects, such as the transformation of the London Docklands, these recommendations aim to replicate that level of revitalization and create a self-sustaining cycle of prosperity. However, it is crucial to address the potential challenges of gentrification and ensure that affordable housing and local communities are not left behind.

The implementation of a 'fat tax' aims to improve life expectancy and the quality of life of Rust Belt inhabitants whilst also alleviating them of the high healthcare costs of the American healthcare system. Furthermore, the reinvestment of the indirect tax revenue can be used to finance the other two policies. As Rust Belt natives begin experiencing higher income from greater savings, their increased spending will ripple through the economy, potentially setting the Rust Belt on a period of growth and development.

By implementing these recommendations, the Rust Belt region can shed its industrial past and emerge as a vibrant "Silicon Heartland,". With a concerted effort from all stakeholders, including the federal government, local authorities, and private entities, the region can reclaim itself as an economic powerhouse, paving the way for a brighter and more prosperous future for generations to come.

## Warwick Think Tank