

RESEARCH AND ADVOCACY TEAM

Working Paper No.2



Social exclusion and disadvantage in the New Economy

Gianni Zappalà, Vanessa Green & Ben Parker

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By

Gianni Zappalà, Vanessa Green & Ben Parker

Preface

In March 1999 The Smith Family moved to enhance its research capacity by forming the Research and Advocacy Team. In line with its vision for a more caring and cohesive Australian community, the Research & Advocacy Team of The Smith Family researches different forms of disadvantage to propose evidence based preventive responses to them and to work for the development of social policy that benefits the entire community. A general theme that integrates all of The Smith Family's research activities is *social capability*. It refers to the capacities of communities and individuals in them to draw from their own strengths and social capital and to move beyond the limitations of disadvantage. The establishment of the Team also reflects The Smith Family's commitment to evidence based programs by ensuring ideas are tested in pilot studies and evaluated for effectiveness. The Smith Family will also use outcomes from its research to contribute to the policy making process to build a better future for all of the disadvantaged through an enhanced advocacy role.

The Smith Family intends to play an active research and publication role, as well as form strategic alliances with universities and other social sector organisations to bring about societal change. A range of publications will make research undertaken by the Team available to a broad range of people who have either an interest in or a commitment to The Smith Family's work. **Background Papers** identify areas to be researched as well as provide important pre-evaluation information of Smith Family programs and activities. **Working Papers** present preliminary research findings that contribute to the development of evidence based social policy and initiate professional dialogue on critical research questions. **Briefing Papers** provide analysis of Smith Family programs and wider social policy issues in a more concise timely manner. A regular **E – Bulletin** will publicise the Team's publications as well as provide a summary on TSF research, policy and advocacy matters. These publications, as well as occasional reports, submissions and monographs will either be produced by members of the Research & Advocacy Team, be the product of collaborative efforts with other researchers or arise from commissioned research. All publications are subject to a refereeing process.

On behalf of the Research and Advocacy Team I trust that you find the following Working Paper a worthwhile contribution to evidence based social research and to the development of social policy that unlocks opportunities and builds capacity for all Australians.

Dr Rob Simons

*National Program Manager
Research & Advocacy*

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Abstract

The term 'new economy' has become increasingly used in Australia by the media, policy makers and scholars. The new economy remains, however, an elusive concept. Some also claim that the new economy will lead to a reduction in poverty and disadvantage. This paper outlines two main definitions of how the term has been used to date and the corresponding implications for the disadvantaged. The first definition of the new economy relates to the extent and usage of the new information and communication technologies (ICT) among countries and firms. The key implication for the disadvantaged is whether access to and usage of ICT is equitably distributed across particular individuals and groups in society.

The second way the term new economy is used is in referring to the broader implications of ICT and 'know-how' for the economic and social structures of society. The term new economy in this context is often used interchangeably with the 'knowledge economy', the 'information economy', and the 'information age'. The key implications for the disadvantaged in this context relate to the labour market effects of the new economy. In particular, its impact on the type and nature of jobs, the remuneration of those jobs, and whether individuals have adequate access to training at work and school.

Most models of the new economy suggest that it has led to increased disadvantage for certain groups in society. This paper adopts a 'social isolation' approach to social exclusion to argue that new economy developments, in the context of the current policy environment, run the risk of exacerbating inequality in Australia and facilitating the opting out of a wealthy minority from the common institutions of society. This in turn increases the likely number of citizens at risk of becoming socially excluded and breaks down the conditions for social solidarity.

The new economy is global in dimension, digital in mechanism, leisure and information in content and is profoundly destabilising established social and economic structures (Tanner 1999:84)

Introduction

The 'new economy' has become the new catch phrase of the decade. It is a term seen and heard daily in the media. The term has also become fashionable among politicians and policy makers. Whether a country is seen to be a new economy has been argued to affect a wide variety of factors including:

- the value of its currency (Lewis 2000);
- trade union recruitment strategies (Kennedy 2000);
- ethnic relations and racism (Rampini 2000);
- the clothes people wear to work (Hewson 2000);
- the presence of dog-friendly workplaces (Long 2000); and even
- the percentage of gays in the population (Hartcher 2000)!

Some scholars have been zealous in proclaiming that the new economy will mean the end of poverty and disadvantage. They argue that we are witnessing the end of inflation, the end of the business cycle and recessions, a return to full employment, productivity increases, reduced monopoly power and an unleashing of entrepreneurial spirit (Sahlman 1999). A new economy version of the trickle down theory will ensure that all sectors of society as well as all countries will benefit and prosper from this increased competition, reduction of prices and increased employment said to result from the new economy.

Similarly, in a recent address to a special conference organised by the Centre for Independent Studies, the head of the American Enterprise Institute argued that the new economy, by improving the efficiency of free markets, was responsible for the present prosperity of the West (DeMuth 2000). Indeed, according to DeMuth the problems of poverty have been solved and 'the truly serious, overarching policy problems have become cultural and ethical'. Technology and wealth now pose a challenge to 'live in a world where wealth and freedom have amplified man's capacities for vice along with his capacities for virtue' (DeMuth 2000). What are we to make of such rosy (naïve?) views of the supposed impact of the new economy? ¹

Before we move to a closer examination of the 'new economy' we need to briefly turn our attention to the first half of the title of this paper. Disadvantage has traditionally been understood in financial terms. Once an individual's or family's financial resources increased beyond some minimum standard (poverty line) they would no longer suffer from the effects of disadvantage. Over recent years, however, it has been acknowledged that inadequate income is only one of a host of factors that can lead to disadvantage. This is reflected in the wide-range of studies that use frameworks of *social exclusion* to understand disadvantage (Jones & Smyth 1999).

Social exclusion refers to a situation in which individuals or communities are subject to multiple forms of disadvantage such that they cease to be full citizens and are unable to participate in the economic, social, cultural and political dimensions of society (Bittman 1998). Social exclusion

¹ See Zappalà (2000) for a summary and critique of the economic debates surrounding the new economy.

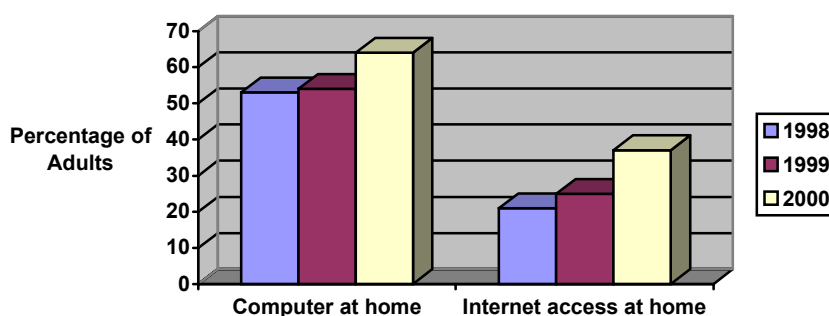
often has a spatial and ethnic/racial dimension to it and is linked to economic change and processes of intergenerational inequality. It places issues of social cohesion and solidarity at the centre of social policy analysis (Jones & Smyth 1999:19). Our analysis is informed by the 'social isolation' approach to social exclusion developed by Barry (1998). In brief, it refers to a situation where the processes by which the disadvantaged are socially excluded occur simultaneously with the socially advantaged 'opting out' and isolating themselves from the community's common institutions. The wealth of a minority enables them to erect barriers that exclude the majority of the citizenry. This situation undermines the basis for social solidarity in a democratic society.

Understanding the new economy (I): the use of and access to ICT

Despite the euphoric headlines, definitions of what is meant by the term 'new economy' remain elusive. Nevertheless, two main ways in which the term 'new economy' is used can be delineated (Zappalà 2000). The first way the term 'new economy' is used is in referring to firms that are involved in the Internet and information and communications technologies (ICT). It is also a term used to contrast with so-called 'old-economy' companies or industries, such as mining, traditional manufacturing and transport. When commentators refer to Australia as an 'old economy' they usually refer to the fact that primary resources rather than technology industries are still the main driver of economic growth. Key indicators of the 'new economy' in this definition of the term include: the extent of Internet access and usage in society, the production and use of information technologies, and the extent of e-commerce between business and consumers and business and business (B2B).

If Internet usage is an indicator of being a new economy then Australia is certainly 'newer' than most. In terms of individuals' Internet usage Australia ranks in the top five countries in the world (Bryan & Potter 2000:58). In terms of e-commerce servers per capita, Australia ranks second behind the US (Allard 2000). Australia ranks well above the OECD average in terms of Internet hosts per 1000 inhabitants and its Internet penetration is the highest in the Asia-Pacific region (OECD 2000; Wilson 2000). Over the past three years, Australia has seen an increase in both the number of computers in homes and the number of homes connected to the Internet. Computer ownership increased from 53 per cent in 1998 to 64 per cent in 2000 while Internet access at home has increased at a rapid rate from 25 per cent in 1999 to 37 per cent in 2000 (Figure 1). A key reason for Australia's high rate of Internet connectivity is its relatively lower costs for Internet connection and usage (OECD 2000).

Figure 1 Percentage of adults with access to a computer and the Internet at home, 1998 to 2000



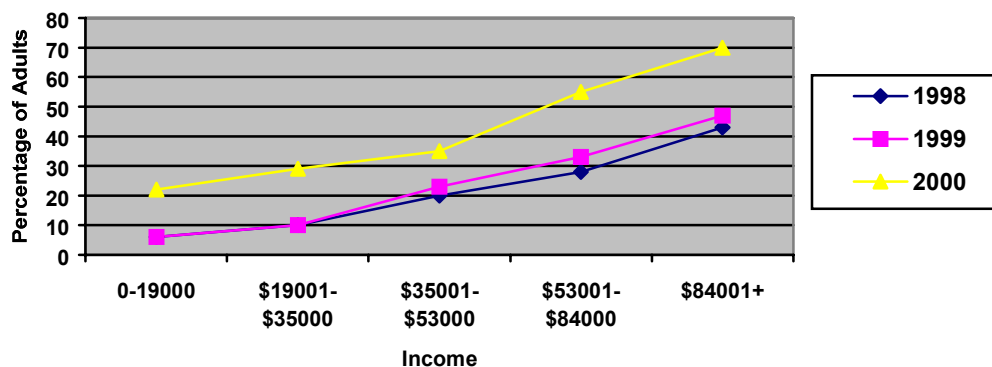
Source: Hellwig & Lloyd (2000:12)

Implications for the disadvantaged: the digital divide

While Australia may be a leader in terms of Internet access and usage the rate of access is not equally distributed across the population (Green 2000). Even before the arrival of the Internet scholars were warning that the differential ability to access and use information technology was accentuating existing inequalities in society. The cost of accessing information meant that 'within each Western society the 'haves' and 'have-nots' in wealth terms, are being reflected in the capacity to participate in the IT revolution' (Wilson 1987:2). The Internet is now an important means to access information about a range of topics including employment, education and training opportunities and enhance peoples' opportunities to participate in society (Department of Trade & Industry 2000).

Individuals' level of income and education are important factors in determining who benefits from the new technology (Hellwig & Lloyd 2000). In 1998/99, for instance only 6 per cent of households on incomes less than \$19,000 were connected to the Internet compared to 47 per cent of those on incomes of more than \$84,000. In 2000 the disparity between income groups is still relatively high. Income earners in the top bracket are 3.5 times more likely to have an Internet connection at home than those in the lowest bracket.²

Figure 2 Percentage of adults with Internet access at home, by income level, 1998 to 2000



Source: Hellwig & Lloyd (2000:15)

It is also becoming increasingly important for children to have access to computers and the Internet at home in order to facilitate their school-based learning (Department of Trade & Industry 2000). While Figure 2 suggests that there has been a steady increase in the number of Internet connections across all income levels, Table 1 shows that those *families* that have an income below \$19,000 are the least likely to have a computer or the Internet at home. In other words, children from low-income households are particularly disadvantaged. An eight year old child in a

² One study of Internet access in the US found that those on incomes over \$75,000 were five times more likely to be connected to the Internet than those on lower incomes. Connection was also higher among the university educated (Dunn & Bosman Partners 2000).

household with an income of more than \$84,000, for instance, is almost seven times more likely to have home access to the Internet than an eight year old in a household with an income below \$19,000.

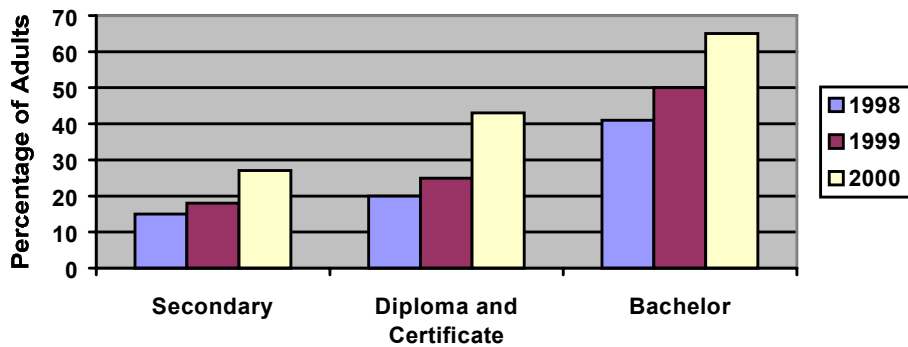
Table 1 Percentage of adults with access to the Internet at home by household income and age of the eldest child, 1999

<i>Age of eldest child</i>	<i>Household Income</i>					<i>Total</i>
	<i>\$0-19,000</i>	<i>\$19001-\$35,000</i>	<i>\$35,000-\$53,000</i>	<i>\$53,001-\$84,000</i>	<i>\$84,000 +</i>	
No children	4	9	22	30	42	21
0-4 yrs	8	9	24	35	50	27
5-9 yrs	7	17	21	32	47	26
10-14 yrs	16	17	32	40	55	35
15-17 yrs	18	15	31	48	57	40
<i>Total</i>	6	11	24	35	47	25

Source: Hellwig & Lloyd (2000:20)

Internet access is also related to an individual's level of educational attainment. Those individuals with a university education are 2.5 times more likely to have home access to the net than those without (Figure 3).

Figure 3 Percentage of adults with Internet access at home by educational qualification, 1998-2000



Source: Hellwig & Lloyd (2000:19)

Apart from the role of socioeconomic factors in Internet home access and usage, other variables such as age, sex, occupation and geographical location are also important. The above-cited study also found that:

- Adults aged over 55 are significantly less likely to have Internet access compared to younger sections of the population;
- Females have lower take-up rates for the Internet than males;

- Blue-collar workers are less likely to be connected to the net at home compared to other occupational groups after controlling for income and qualifications;
- Geographic location also appears to have some influence on home Internet access. While the proportion of adults with Internet access at home in metropolitan areas grew from 24 to 30 per cent between 1998 and 1999, the corresponding increase in non-metropolitan areas was from 15 to 18 per cent. Once education and income variables were controlled for, however, the influence of geographic location diminished. This suggests that the observed differences between metropolitan and non-metropolitan areas is a function of the different sociodemographic characteristics of metropolitan and non-metropolitan populations, in particular, the lower income and qualification levels of the latter. Nevertheless, people in rural and remote areas do not have the same level of IT infrastructure and support as metropolitan residents and suffer educational disadvantages as a result (HREOC 2000).

Understanding the new economy (II): the rise of the 'network society'

The second way the term 'new economy' is used is in referring to the *broader implications of ICT and 'know-how' for the economic and social structures of society* (see for example Castells 1996). The term 'new economy' in this context is often used interchangeably with the 'knowledge economy', the 'information economy', the 'information age', and the 'network society'. The increasing internationalisation of the economy also forms part of this discourse as it is argued that ICT has facilitated globalisation. This use of the term particularly emphasises the need for workers to acquire a range of skills and be able to continuously adapt these skills in the face of changing technology (OECD 1996). The focus is also on the importance of education and public infrastructure more generally in providing workers with the skills they will need in the new economy.

Most economists (be they new economy proponents or sceptics) agree that the assets of corporations in the 'modern economy' are increasingly knowledge based and intangible rather than tangible (Zappalà 2000). Firms still make profits through possessing a distinctive capability that others do not. What has changed is where the source of this capability comes from. They no longer involve large scale and market dominance, but rely on the knowledge base of employees, brands, patents and so on. According to Thurow:

In the past when capitalists talked about their wealth they were talking about their ownership of plant and equipment and natural resources. In the future when capitalists talk about their wealth they will be talking about their control of knowledge (1999:xv).

Economic activity is increasingly intangible and immaterial and involves processing and analysing information, making judgements, and providing services. The generation and exploitation of knowledge is becoming critical to how companies and economies develop and sustain competitive advantage (Leadbeater 2000; Kay 2000). In a world of more open and liberalised markets, it is less feasible for companies to sustain competitiveness on the basis of traditional assets such as land, raw materials, machinery and cheap labour. Instead, competitiveness must be based on intangible assets, capabilities and competencies that are consumer driven.

Implications for the disadvantaged: new economy insiders and outsiders

The wage pyramid

The main implications for the disadvantaged in this context relate to the social exclusion that may arise as a result of the changes that the new economy has brought to the labour market. Several scholars in the US have raised alarm bells that their society is in danger of being split along entrenched social groups primarily as a result of the industry and occupational patterns that the new economy is producing.³ While Thurow (1999) speaks of the policies needed to generate a wealth pyramid in the new economy he also argues that the third industrial revolution is 'shaking the economic foundations of that stable industrial middle class and creating a two-tiered economy' (p.280). The main culprit according to Thurow is the increasingly stark wage inequality being generated by sectoral changes in employment. He argues that:

...in the third industrial revolution, workers are leaving manufacturing and mining (high-wage sectors) and entering services (a generally low-wage sector with a wide dispersion of wages). Revolutions that led to higher and more equal distribution of earnings have been superseded by a revolution leading to lower median and more unequal distributions of earnings (p.6).

In Thurow's model, a third of the workforce (e.g. the mix of technical and financial experts employed in new economy industries) will do well from the dynamism produced by the new economy, while the other two-thirds (less qualified and trained, employed primarily in the services sector) will find it increasingly difficult to enjoy a decent standard of living. The real wages for this bottom two-thirds of the workforce have been consistently falling while rising for the top third (p.144). The risk, according to Thurow, is that the US is heading towards an 'enclave' model of economic development. The problem is not that this model will not work but that it does. In other words, the issue is a moral rather than an economic one:

Is one living in a good society if that society knowingly lets a major fraction of its citizens drop out of the first world and effectively become third world wage earners? (p. 268)

Thurow argues that the way to avoid this occurring is through policies that re-skill the bottom two-thirds of the workforce, improve the wages of the service sector and strengthen the system of public education. In short, a combination of public policies that focus on education and infrastructure combined with entrepreneurs who can harness the new intangible assets of firms and knowledge workers will lead to wealth creation, hence his 'wealth pyramid'.

The incisive analysis of wage trends in the US by James Galbraith (1998) also supports the view that a growing polarisation in society along occupational and pay lines is occurring. He conceptualises a three-sector model of the US economy that comprises the K-sector, the C-sector and the S-sector. The K-sector (knowledge or capital) comprises the machine makers, those that build instruments used by others (also comprises computer programmers, professionals and so on). It also corresponds to Thurow's top-third of knowledge workers whose salaries are at the top of the wage scale. The C-sector (consumption goods) comprises industries where workers are employed using the machines designed in the K-sector who produce goods consumed by the

³ The 'new economy' has been very much a US phenomenon to date so this section draws on recent work on the US situation.

population. The S-sector (services) comprises workers who use little or no capital goods and do not produce machinery or goods.

Galbraith's model, which he supports with empirical evidence, is that for each sector there is a corresponding salary hierarchy. To summarise:

In the K-sector, firms need workers, and knowledge workers have an advantage. Wages and salaries, especially salaries, in this sector drift upward under competitive pressure and in consequence of expanding trade. In the S-sector, workers are vulnerable, insecure, and desperate for their jobs. Wages in this sector tend to drift downward, unless sustained by political and social pressures. In the C-sector, wages depend on the balance of power between companies and workers (p. 95).

Galbraith's thesis suggests that we are witnessing a division between the 'new economy insiders' and a growing number of 'new economy outsiders' in terms of pay. Apart from the empirical evidence cited in Galbraith (1998) and Thurow (1999) other studies are emerging that confirm these trends for the US. One study by the US Conference Board found that the number of full-time workers classified as poor had increased since 1972. The cohort of working poor has risen both in numbers and as a share of those employed full-time since 1973. Almost half of all jobs in the US now comprise low-skill, low-pay positions, compared to one-third 25 years ago (Gray 2000).

The growing income and wage divide in Australia

Recent Australian studies also suggest that changes in the economic and social structure have led to increasing inequality in terms of incomes and earnings. How much, if any, of this increase in inequality in Australia is due to 'new economy' factors is not clear. Indeed, a great deal of it occurred during the 1970s and 1980s (ACOSS 1995; Harding 1997; Barrett et al 1999). The increases in inequality, particularly over the last decade, are primarily due to changes in the labour market such as the relative decline of full-time manufacturing jobs and the corresponding rise of part-time and casual employment in the services sector that mirrors the US models discussed above (ACIRRT 1999).

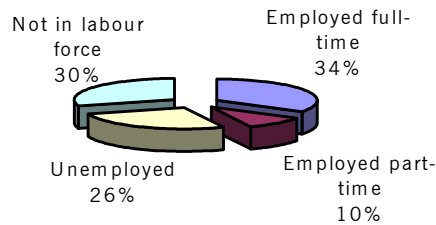
Research commissioned from NATSEM for *The Australian's Advance Australia Where* series indicates that there has been a growing inequality in incomes arising from both a growth in high and low income earners. Between 1982 and 1996-97 the number of employees in the top earnings bracket doubled to over one million at a time when the total workforce grew by 42 per cent. Workers in this top bracket received on average \$1,488 per week, an 18 per cent increase between 1996-97 and 1982. Over the same period the number of workers in the bottom pay bracket almost doubled to 1.1 million. Over this time their average real income dropped by \$4 to \$205 a week. In 1982, 45 per cent of the workforce earned between 75 and 125 per cent of median earnings but by 1997 this had dropped to 37 per cent (Steketee 2000). The new economy phenomenon that enables dotcom founders and executives to handsomely reward themselves now on the basis of anticipated future returns (often while the companies are still experiencing massive losses) has likely exacerbated this trend (Zappalà 2000).

There has also occurred an increased inequality of wealth over the same period that could lead to further income inequality in the future. The NATSEM analysis found a 'sharp inequality increase' as measured by the Gini coefficient for a range of income measures including: Business income, investment income, wage income, earned income and private income. However, these increases

were offset by changes in taxation and social security arrangements over this time leading to the measure of disposable income inequality to be approximately the same. In 1996-97 the top 10 per cent of the population received 49.1 per cent of all income from interest, rent and dividends up from 38.7 per cent in 1982 (The Australian 2000).

A report by NATSEM commissioned by The Smith Family found that one third of those now in poverty live in families where the head is employed on a full-time basis, while 10 per cent live in families where the head is employed on a part-time basis (Figure 4). In other words 44 per cent have a connection to the labour market.

Figure 4 **Australians in poverty by labour force status of head adult in household, 1999**

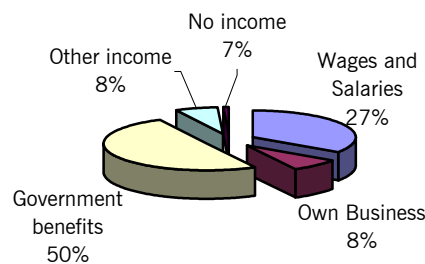


Source: Harding & Szukalska (2000)

Notes: Based on the *after housing half-average income* poverty line.

Figure 5 also shows that for 27 per cent of Australians in poverty the main family source of income is wages and salaries. As is further highlighted below, simply having a job is no guarantee of having sufficient financial resources to fully participate in society.

Figure 5 **Australians in poverty by main income source of their family, 1999**



Source: Harding & Szukalska (2000)

Notes: Based on the *after housing half-average income* poverty line.

Labour market skills and training

Apart from the impact on pay and income inequality the new economy may also affect some people's access to the skills and training needed to operate in the new economy. As more organisations embrace the use of IT, workers will be expected to acquire a range of skills and be required to continuously update these skills as the technology changes. Computer literacy is becoming increasingly important for re-entry to the labour market. Studies show a rise in the amount of training required for jobs, an increasing use of computers and importance of communication, social and problem-solving skills and a simultaneous reduction in the use of manual skills (Green et al 1998). The danger, as one OECD Councillor somewhat prophetically stated just over a decade ago is that:

...there is a great risk that this new economy – if the necessary investment in education, training and skill formation is not made – *will establish a dividing line between insiders and outsiders*. Those who can perform and those who can't perform in the new environment (Bengsston 1989:51).

The problem is that the privileged one third of workers who do well out of the new economy in terms of good jobs and pay also have a better capacity to further invest in their skills. The bottom two-thirds (especially those in Galbraith's S-Sector) face a 'double jeopardy' whereby they lack the personal resources to upgrade their skills and their employers are also unlikely to provide adequate training (Latham 2000). Evidence suggests that workers who are in low paying jobs, on short-term contracts, not covered by a union collective agreement, and work part-time have experienced substantially fewer skill increases and work-related training than better off workers (Green et al 1998; Arulampalam & Booth 1998).

As the new economy exacerbates the trend towards marginal forms of employment, earnings inequality is likely to further increase since jobs that offer less training have lower earnings. In other words, being employed in the new economy does not in and of itself ensure social inclusion. The evidence to date on the jobs the new economy is creating for a large part of the labour force is that they are not jobs that can restore a sense of control or offer prospects for the future for those already marginalised (Atkinson 1998).

Furthermore, the hype surrounding the new economy has the danger that policy makers will ignore the benefits of a viable manufacturing industry in the race to be seen as 'newer than thou'. Based on an in-depth knowledge of the Japanese economy, Fingleton (1999) argues that the US is sacrificing its once valuable manufacturing base in favour of the new economy (by which he means a range of postindustrial activities in the service, software, information, entertainment industries and others). According to Fingleton, 'postindustrial activities' like e-commerce are relatively easy to pursue, do not require major effort and its benefits are generally short-term. Manufacturing on the other hand requires much more capital and complex 'know how' and its benefits are much greater in the long-term (e.g. in terms of up-skilling and training). Policies should therefore encourage the expansion of the industrial sector. Not only is this sector good at creating jobs according to Fingleton, but wages move in line with productivity increases. An Australian variant of this analysis also emphasises the importance of manufacturing to existing industries as well as for developing high-tech industries that will act as leaders in the new economy sector (Apple 2000).

It is in the context of these labour market factors that the new economy may also exacerbate the social exclusion of particular ethnic minorities. The dramatic decline of manufacturing in Australia

since the late 1960s as a source of semi-skilled and low-skilled employment has particularly affected immigrant communities (O'Loughlin & Watson 1997). The growth in employment that has occurred has been in sectors and occupations that require a high level of English language proficiency (Birrell & Seol 1998).

Some have argued that the decline in opportunities for entry level jobs in manufacturing for immigrants from Non-English speaking background (NESB) combined with residential concentration in particular areas has led to the formation of an 'ethnic underclass' and 'ethnic ghettos' (Healy 1998). While it is true that the decline of manufacturing has adversely impacted on the opportunities for employment the case that we are witnessing permanent forms of social exclusion based on ethnic-spatial grounds is not convincing (Castles et al 1998: 91-99).

Recent evidence from the US suggests that the risk for Australia is not that we are witnessing the emergence of an 'ethnic underclass', but that the new economy will repeat the labour market segmentation along ethnic lines that occurred in the post-war period (Lever Tracy & Quinlan 1988). It is clear that some ethnic minorities make up the bulk of the jobs in the low-skilled services sector of the labour market that the new economy is creating (Thurow's bottom two-thirds). One study found that employed Latino-Americans were 13 times more likely to have poverty level household incomes than working whites and be only half as likely to use a computer at work compared to employed whites. These differences remained after controlling for age, sex and education level (IHPS 2000; California Budget Project 2000).

The role of education: Schools and the new economy

A key factor in debates about the new economy (in both uses of the term) is the role of education. With respect to Internet access and usage, for instance, those with higher levels of education were more likely to have home access. With respect to the broader definition of the new economy, those with high levels of education are more likely to be in jobs that will further enhance the skills needed to survive in the labour market of the future.

But we also know that education, or more precisely, the lack of it, is highly correlated to disadvantage. Differences in educational attainments are crucial in generating and sustaining social exclusion. A key finding in virtually all studies that have examined this subject is that a child's educational achievement is primarily related to the socioeconomic status of their parent/s (Zappalà & Parker 2000).⁴ Lower educational attainment generally means lower lifetime earnings (Machin 1998). In other words, an individual's likely position and attainment in the labour market can be fairly accurately predicted by looking at their life situation from the time of birth to when they start school. The factors that surround development are key to whether the persistence of economic success or failure across generations is maintained (Machin 1998). So new economy or not the likely labour market position of today's children (especially those from socioeconomically disadvantaged backgrounds) is to a large degree mapped out. As one commentator aptly stated:

the Internet did not create a new social divide – it just exacerbates all the old ones created by poverty, isolation and poor education (Griffin 2000).

So far we have mostly concentrated on the new economy and those in the labour market. Given the young age at which disadvantage affects an individual's life chances, schools have an

⁴ Other key mediating variables include the type of school, geographic location, family structure and sex.

important role to play in ensuring that students are fully prepared to participate socially and economically in the new economy. As noted earlier computer literacy is a critical component to success in the new economy and in creating the kind of labor force needed in the future. Students will need to learn 'how to learn' in order to face the challenges and accept innovation because specific ICT skills that are dependent on current technologies will inevitably become redundant (Meredyth et al 1999).

As is the case with home access to the Internet, there is also considerable disparity between schools with regard to the availability and access of the Internet. This disparity is evident even within the state school system. Some schools, for instance, have a ratio of 12 students per computer while others have a ratio of 6 students per computer. Part of the disparity can be explained by school size while another contributing factor is the wide discretion given to schools with regard to how they allocate their technology funding (Noonan 2000). In addition to providing computers and networks there needs to be an integrated approach linking information technology resources to whole of school planning. A recent report found consistent links between those schools that had a clearly defined ICT policy and the priority given at a school to the acquisition of computers, networking, technical support and professional development for teachers (Meredyth et al 1999).

A school's capacity to perform the role of preparing students for the new economy is going to be closely linked to availability of resources because the implementation of a sophisticated ICT policy is more likely to occur in schools that are well resourced. Some private schools, for instance, are able to implement ICT policies that reflect workplace practice both in terms of their acquisition of ICT and in the way typical knowledge based workplaces are structured with email, Internet access and remote access facilities. In such schools, children are being taught to take responsibility for their own learning and will therefore be better prepared for the workplace (Zampetakis 2000). It is the ability to take a holistic approach to the use of IT that sets many of the private schools apart. The principal of Knox Grammar (a private school in Sydney), for example, has implemented a sophisticated ICT policy that includes the purchase (by parents) of individual laptop computers for children from Year 5 and above with facilities being put in place for remote access. He states:

This is not a skill-based exercise this is a program very much based on using technology to improve the nature of the education the students receive and getting kids more active in their own learning and less a victim of their education (cited in Zampetakis 2000).

The better integration of ICT into school curricula in private schools will further increase the advantages of private education obtained by some children. What about those children who are already at a disadvantage and more likely to be in the state school system? Recent research has suggested that higher per pupil spending, reduced class sizes, and high quality teaching can have a positive impact on the educational outcomes of disadvantaged students (Sparkes 1999). Furthermore, a relevant and engaging curriculum is one of the main keys to improving outcomes in schools that serve disadvantaged communities (Ryan 2000; Sparkes 1999). The effective and focused use of ICT methodologies, therefore, are a possible means of ameliorating the educational disadvantage that children from low SES often experience. Despite the complexity and challenge of reversing the educational outcomes of students from disadvantage backgrounds a principal at a disadvantaged school has recognised the important opportunities ICT can create for his students:

Communication and information technologies are the new currency of power and our students have a need to know how to operate in that currency and a right to do so (Ryan 2000:19).

An ICT related curriculum is challenging and engaging for young people as they begin to see the useful benefits of their efforts. In many situations the students are ahead of the teacher with regard to ICT skills (Ryan 2000). As we argue below, however, current policies with respect to education funding are likely to privilege those students that are already gaining from the new economy and penalise those that are outside it.

The new economy, social exclusion and ‘social isolation’

The above discussion on the importance of education, especially at the school level, is an appropriate point to return to the perspective of social exclusion introduced earlier. Being socially excluded from society (in a negative sense) is usually an involuntary phenomenon on the part of the excluded group (Atkinson 1998). Another dimension to social exclusion that can be either voluntary or involuntary is what Barry (1998) has termed ‘social isolation’. He argues that one of the outcomes of the increasing economic inequality in countries such as the US and Britain is that growing numbers of the well off are electing to live outside of the common institutions of society. He refers to this situation as a form of elective social isolation.

This type of ‘social exclusion’ differs to the more common use of the term whereby a majority is able to exclude a minority, but rather refers to a situation whereby a minority is able to exclude the majority. This can be most clearly seen in the ‘gated communities’ that have arisen in the US over the last two decades. This form of social exclusion, argues Barry, is detrimental to social solidarity. Social solidarity refers to a ‘sense of fellow-feeling that extends beyond people with whom one is in personal contact’ and is strengthened by peoples’ participation in common or public institutions (Barry 1998:16).

The opting out of the wealthy from the common institutions of society can have several detrimental effects on the degree of social solidarity in the longer term. First, it is likely that the standards of the public institutions themselves will suffer. The participation of higher-income groups in public institutions is valuable because their financial contribution can be used to develop resources that are then available to all in the system (e.g. ICT resources in schools). It has also been shown, for instance, that having heterogeneous populations use the same public services (e.g. state schools) is beneficial to all groups (Barry 1998).

Second, if the quality of public services is perceived as being of lower quality than that available in the private sector it leads to a vicious cycle of degradation of those public services. It further encourages those that can afford it to remove themselves and their families into the private sphere. Those who must use public institutions are excluded from better quality standards of health care, education, and access to social networks. Being denied access to these spheres ensures that the cycle of exclusion is perpetuated in future generations.

Third, the opting out of the wealthy leads to a failure of those who are able to fully participate in society to identify with those suffering the effects of exclusion. The ‘disadvantaged’ and excluded become seen as a drain on the public purse or a potential criminal threat (the ‘underclass’ discourse). This is reflected in social policies that increasingly focus on restricting access to social

security benefits and resort to criminal law as a mode of social enforcement (e.g. mandatory sentencing, refugee detention policies).

Current public policies in Australia, especially in the areas of health, education, welfare and immigration could be interpreted as encouraging those who can afford it to adopt a 'social isolation' mentality. The Federal government's recent changes to health policy, for instance, such as the private health insurance rebate and Lifetime Health Cover policy will only serve to subsidise the wealthy at the expense of the financially disadvantaged. The budgetary assistance provided to the private health insurance industry is now greater than that provided to the mining, manufacturing and primary agricultural production industries combined (Smith 2000a).

According to Julie Smith, a Senior Research Fellow at the Australia Institute, the rebate for private health insurance (started in 1998-99) has a direct annual cost of over \$2 billion. Furthermore, current policies towards health create incentives for the middle classes to opt out of the public system and join the private schemes. The Medicare levy surcharge, for instance, introduced in 1997-98, penalised people earning more than \$50,000 who did not have private health insurance. The lifetime health coverage system that came into effect in July 2000 further penalises people without private health insurance. It has led to a surge in the uptake of private health insurance by people who were generally satisfied with the Medicare system. Between September 1999 and September 2000 the numbers of Australians with private health insurance increased from almost 5.9 to 8.8 million (or 46 per cent of the population), which represents a 49% per cent increase (PHIAC 2000).

As Smith concludes:

The private health insurance rebate drains funds away from the public system. As the quality of public health care declines, private health insurance begins to look a better buy to the many doubting Thomases...the scheme 'punishes' middle and high-income earners choosing to support Medicare. It is only a matter of time before those who have been forced into the private health system start to question why they should pay for Medicare at all (Smith 2000b).

More importantly, are the current government's policies on education funding. These have been widely criticised at the tertiary level for impeding Australia's ability to become a 'knowledge nation' (Oxley 2000; Narin et al 2000). There has been less focus on the negative implications of the government's school level funding policies for creating a knowledge nation. In 1996, for instance, the Howard Government introduced the Enrolment Benchmark Adjustment (EBA) formula. This allowed the proportion of Commonwealth funds going to public and private schools to vary based on respective enrolment numbers in the two sectors. Increases in the proportion of students attending non-government schools since that time have meant that over \$60 million has been taken from public school funding despite the fact that total student enrolments in public schools have increased by 26,000 over the same period (AEU 2000a).

Recent changes to the system for funding non-government schools at the federal level mean that government funding to private schools will continue to increase.⁵ Estimates suggest that the new scheme will also result in wealthier schools receiving the largest increases (Martin 2000). The

⁵ This is as a result of the Senate passing the *States Grants (Primary and Secondary Education Assistance) Bill 2000* on the 7th December 2000.

average Category 1 school (currently classified as the wealthiest), for instance, will receive an additional \$800,000 per year while the average Catholic school will receive an extra \$60,000 a year (AEU 2000b).⁶ In 1996 public schools received almost 42 per cent of Commonwealth funding to Australian schools. It is forecast that this proportion will be reduced to 32 per cent as a result of the Enrolment Benchmark Adjustment formula and the recently passed *States Grants Bill* (AEU 2000a).

Once again, not only are these policies detrimental for success in the new economy (especially for the disadvantaged) but they are facilitating the social isolation of the wealthy.⁷ As one social commentator recently observed:

Once the middle class have been bribed or blackmailed into taking private health insurance and withdrawing their children from public schools, and income security in their old age becomes dependent on the All-Ordinaries Index rather than public investment in infrastructure, they won't need much convincing to vote for politicians who are prepared to run down public services in order to fund tax cuts (Davidson 2000).

Clearly not all these trends are the direct result of the new economy. Arguments about the divide between private opulence for the few and public squalor for the rest are not new (Galbraith 1958). Indeed, as one political economist has argued, rather than using concepts such as 'new economy' or 'third industrial revolution' to analyse contemporary socioeconomic trends, it may be more appropriate to return to concepts such as 'immiserising growth' (Halevi 2000). This latter concept was once applied to describe the phenomenon in developing countries where economic growth was accompanied by a simultaneous accentuation in poverty for most of the society.

It does not seem unreasonable to argue that the evidence to date suggests that the new economy, however defined, will facilitate the estrangement of the 'new economy insiders' from the 'new economy outsiders' in a manner consistent with 'immiserising growth'. The massive rise in disposable income for the top echelon of the new economy pyramid together with public policies that discriminate in favour of private over public services will make it possible and more attractive for the wealthy to 'socially isolate' or exclude themselves from society's common institutions. The supposed 'wealth pyramid' of the new economy may well become a pyramid more in line with its origins: one constructed by the majority of the population in poor conditions for a small but wealthy pharaonic minority.

Conclusion

As with all social and economic transformations throughout history, some groups and individuals are better able to take advantage of the changes wrought. Whether the new economy represents such a transformation is still a matter for debate (Zappalà 2000). Nevertheless, in this paper we have argued that no matter what definition of the term 'new economy' is used, there are clear implications for the disadvantaged and socially excluded.

⁶ While some wealthy private schools will receive funding increases under the proposed formula, it will also benefit some private schools with poorer resources.

⁷ The proportion of students in government schools relative to private schools has been slowly declining since the 1980s (ABS 1999). Much of this trend is due to anxiety among middle class parents that educational quality in state schools is declining, in part due to poorer resources in state relative to private schools.

The new economy is creating 'good' jobs for those with the necessary levels of education and skills. Employment growth is concentrated in the services sector and is increasingly precarious and poorly paid in nature with limited access to the new skills and technology. To date it seems that only a small section of the population is enjoying salary increases at the expense of the majority of the population. To reiterate, the recently commissioned Smith Family report on financial disadvantage found that *almost half of those now in poverty live in families where the head is employed on a full-time or part-time basis.*

At the very least, not everyone is currently able to enjoy the benefits of the new ICT. Indeed, the Internet is likely to exacerbate all the traditional inequalities that result from financial disadvantage, isolation and poor education. It can be argued that with time and appropriate policies access can be increased. But real participation and improvements in living standards require more than access. As Thurow concluded his analysis of the new economy in the US:

In the end it is this system of public education that lies behind the continuous improvements in standards of living and the ever-rising levels of wealth we now take for granted ...without public support, education levels tend to fall (1999:131, 137).

Education has always been central to overcoming disadvantage. The new economy developments outlined in this paper will merely strengthen the role of education in this relationship. The growing income inequality when combined with public policies that discriminate in favour of the private sector in key societal functions such as health and education runs the risk of the middle classes (already said to be disappearing) opting out of the common institutions of society. If these trends continue, the new economy will be the preserve of an exclusive minority, the apex of the so-called wealth pyramid. Although Thurow promotes his wealth pyramid as a way for individuals, companies and nations to succeed in the new economy it is in effect also mirroring the social and economic structures of the new economy. Such a pyramid can only serve to create a polarised society where social solidarity is diminished.

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