

Museums, national resources, and the broader economic impacts of National Museum Wales

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Abstract

How do public museums balance their economic costs with their economic benefits? Political debate often strips nuance from museum management, with the total public spending going into a museum countered by a museum's direct revenue generation. This paper attempts to complicate those false dichotomies by demonstrating that while free-to-enter public museums generate relatively little of their own direct revenue, their broader contribution to the regional economy must be considered. Across Britain, national museums play a central role in the tourist economy, and in Wales, St. Fagans National Museum of History has long been the nation's most visited tourist destination. With this in mind, using self-provided data on spending inside museums and within broader museum communities, we attempt to highlight the community economic impacts of all seven National Museum Wales (NMW) museums. The findings support other museum studies which identify a regional multiplying effect that free entry museums have on regional economies, and that even museums which generate little direct revenue could be considered for their 'return on investment' in broader regional economic and cultural development.

Introduction

Today, Amgueddfa Cymru [Museum Wales] is a national resource for the delivery of key public services, and as a charity with the continued support of funders, partners and volunteers, has the potential to be an integral part of a renewed welfare state in Wales. David Anderson, Former Director General of National Museum Wales (NMW, 2020a, p.7)

Ongoing debates counter free museum entry as a driving force for visitation, particularly among international visitors with their expectations for museum entrance fees (Silberberg and Lord, 2020) and the significance of the (free) museum as a draw for tourists (Travers, 2006).

Silberberg and Lord (2020) argue that free museum admission is more common than perceived, particularly for regional, municipal, and university and non-profit museums, with one-half of US art and history museums free to enter. Others centralize the ethical implications of accessibility when public museums charge entrance fees. Gurian (2005, p.33) states that museums "cannot hold the patrimony of all if only some can afford entry".

For visitors, free entry to national museums in England and Wales significantly changed visitor numbers. From 2001-2010, English

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national museums re-introduced free entry and visitation increased by 151% (DCMS & Hunt, 2011). In Wales, national museums visitation in 2001 was 670,609 (NMGW, 2001, p.33), and after three years of free entry St. Fagans alone had nearly that many visitors (631,731; ALVA, 2004). By 2010, NMW's visitor numbers had increased to over 1.6 million (NMW, 2010, p.4).

While Fujiwara et al. (2018) argue the need to consider a museum's willingness to pay (WTP) indexes in the economic policy of museum fundina. governance. management, they argue that "failing to adequately value [non-market values] risks an under-appreciation of the social value of cultural investments" (Fujiwara et al. 2018, p.3; cf. Whelan 2015; Bakhshi et al. 2015). Indeed, a visitor's WTP only reflects the current audience of the museum and leaves little room for future adaptation or cultural shifts, and more importantly fails to contextualize the economic reality of museum entry fees. Bryan et al. (2012, p.149) likewise argue that many economic impact assessments "ignore the many and developing local socioeconomic contributions that museums make." While Fujiwara et al. (2018) found average means between £6.01 - £7.79 per visitor or £2.79 -£4.06 for non-visitors across four large free-toenter English museums, they do not consider the lost economic value from WTP. Are visitors currently spending that money in an in-house cafe which perhaps draws a significant number of traditional or non-traditional visitors in the doors? When they do not have to pay an entrance fee, are visitors spending more money than the WTP rate outside of the museum in the local community, what is that rate, and what are the broader economic benefits of sustaining those non-museum enterprises? And finally, of those visitors, how much does the average visitor donate, and does that correlate with the WTP rate or shape the amounts they spend or would spend in and outside of the museum?

Across Europe, in particular, cultural heritage often serves as a regional economic engine, and many sites of World Heritage, Intangible Cultural Heritage, national parks, or heritage routes include a centralizing national or state-supported museum. As Piekkola et al. (2014, p.15) argue, museums can often "influence

travel decisions" to a point where they impact local and regional economics through their often centralized role in the tourism industry.

Multiple museum studies have attempted to ascertain the 'return on investment' or 'multiplying effects' of economic impact from museums. Research by Piekkola et al. (2014, p.33) into the economic impacts of the 196 museums of the Finnish Museums Association found an average spending of €333.12 per visitor, €32.80 of which was "visitor-specific spending related to the museum visit." Using a single case study, Plaza (2006, p.464) found that Guggenheim Museum Bilbao was able to earn back its investment in under a decade. However, this came at the cost of relying upon "ticket sales from blockbuster exhibitions" which as a model restricts "access to the museum for those citizens who prefer to spend their money on other recreational/cultural activities that are less expensive." Entrance fees also limit overall accessibility and the 'multiplier effect' that free (or cheaper) museums tend to generate. More broadly, Travers (2006, p.86), suggests that "museums and galleries offer both a major internationally traded service (by generating exports) but also underpin the creativity upon which future high value-added economic activity is likely to be based." Their work on major UK museums and galleries argues that a combination of direct tourism-driven impacts and public investments into the creative class and the innovation and indirect economic impacts from museum staff and research is a multi-billion-pound economic sector across the UK (similar work can be found by Greffe et al., 2017 on French museums).

Importantly, not all regional development assessments have focused upon economic sustainability. Sociocultural impacts factor into work such as Hutchison's (2013) case study of the Royal Albert Memorial Museum. As Carvalho et al. (2014, p.15) state, "[m]useums have missions and goals that are difficult to measure and especially their impact cannot be restricted to a financial perspective". Fujiwara et al. (2018, p.3) add that, "an understanding of the value of non-market goods and services to the public is important for public investment decisions, policy appraisal and evaluation in existing and future museums".

Museums also have long-term economic impacts, for which it is not possible to place a precise monetary value. Impacts include visitors' self-knowledge, conception of identity, and personality which, in turn, increase creativity and support innovation. With their activity, the museums support wellbeing with long-term economic impacts (Bakhshi et al. 2015). In other words, failing to consider sociocultural impacts, non-market goods and services, and broader spatial and temporal economic trends within museums' impacts can translate into a loss of perspective and context within the broader role public museums play within socioeconomic structures. Museums, or the political and economic entities governing and funding them, have increasingly turned towards 'creative' means of revenue generation corporate partnerships, such as paid and additional fee-oriented exhibitions, activities. Abdullah and Khadaroo (2017, however, advise p.275) against neoliberal-led creativity for the tendency to "create new problems," particularly "a clash between commercial ethos and cultural ethos" brought on from profit-making activities within public institutions.

Background and methods

While museums, governments, and non-profit organizations all highlight the value of cultural heritage, socially and economically, the true economic value remains difficult to determine. At the same time as some political decisions may elevate the cultural heritage of a region, or even rely upon it economically, funding to cultural heritage institutions has generally decreased, particularly across the United Kingdom.

Early 2024 has already seen one of the world's most prominent free-to-enter national public museum systems, NMW, jolted by drastic budget cuts coming from the Welsh Government alongside the UK's significant inflation. With a £700 million deficit, the Welsh Government proposed a cut in NMW funding by £3 million in 2024 (Adams, 2024). In a series of globally headline-catching articles, the Chief Executive of NMW, Jane Richardson, stated that without funding to address both the £3 million cut and an existing £1.5 million deficit, National Museum Cardiff would be forced to

close and relocate given the needs for "urgent critical work" (Horton, 2024). Only three days later the Welsh Government's Cabinet Secretary for Culture, Lesley Griffiths, pushed back by stating: "I want to reassure everyone the National Museum is not closing." In a BBC Wales follow-up to the first article, highlighting 10,000+ signatures gathered for the Welsh Senedd Petition (Increase, don't cut, funding for the National Library, Amgueddfa Cymru [AC] and the Royal Commission) attention also turned towards NMW fees. The Welsh Culture Secretary, however, stood firm in the Welsh Government's commitment to find sources of revenue for the museums, but that "charging to go in is not one of them" (Gwawr, 2024).

Revenue generation, cultural and economic value, and the crises of publicly funded heritage institutions, particularly NMW, preface structure of this paper. Utilizina participatory methods and simple surveying alongside an organized study abroad program to Wales, we utilize a mixed-method immersive approach towards understanding value, community impact, and the economic sustainability of the communities built around seven NMW museums. This work generates survey results from a group of 18 Americans traveling in Wales (the authors of this paper), gauging a rough community economic impact of NMW. Unique for a study program, the itinerary was structured—in part—around the seven national museums (as well as the NMW-run Oriel y Parc in St. Davids) in Wales, with visits to all eight sites during the 15-day program. The data collection was restricted to only what was spent in each NMW town. For National Museum Cardiff, the study was bounded to Cathays Park. In each of the three figures eight locations, were documented: how much we spent in the museum, how much we donated to the museum, and how much we spent outside of the museum in the community. The focus remained upon direct spending within and beyond individual museums, and with an acknowledgement that the study does not capture the indirect effects from local spending. While this study is neither fully objective nor representative, 16 of the 18 study co-authors were not aware of why we were collecting this data until after all museums were visited. The process of collecting data can influence spending decisions. However, we followed

Stynes and White's (2006) method of immediate documentation of spending to reduce the recall error which may also occur when recording visitor spending. Regardless of these concerns, we anticipate that the following results, discussions, and conclusions may offer a means forward for broader economic research into the direct and indirect impacts of public cultural heritage, public museums, in particular.

Given that the purpose of the study program was driven by heritage narratives, interpretation, and landscape, and not primarily a research project to assess economic impact, time spent at the eight museums was not even, nor was the time within their connected communities. A list of the eight visited NMW sites and their locations is provided below (see Table 1 for duration of visit at each site):

- St. Fagans National Museum of History, St. Fagans.
- National Museum Cardiff, Cathays Park, Cardiff.
- National Waterfront Museum, Swansea
- Oriel y Parc, St. Davids.
- National Wool Museum, Dre-fach Felindre
- National Slate Museum, Llanberis.
- Big Pit: National Coal Museum, Blaenavon.
- National Roman Legion Museum, Caerleon.

Across the seven museums and the Oriel y Parc Gallery, the activities varied, and the timing of the visits (e.g. St. Fagans directly from the airport or Waterfront in transition from Cardiff to St. Davids) could also have influenced spending patterns. External forces, such as prior reading of Thomas (2017) on the national identity of wool, and Price and Ronck (2019) on the role of slate could also have shaped perceptions of value.

Table 1: Spending data across museums and communities

Museum/ Gallery	St. Fagans	Cardiff	Water- front	Wool	Oriel y Parc	Slate	Coal	Roman	Total
Number of study co- authors surveyed	16	18	18	18	18	18	18	18	18
Hours in museum	3.75	1.5	1.0	3.0	1.5	2.5	3.0	1.0	17.25
Total spend in museum	£173.63	£137.50	£16.00	£1,254.30	£187.25	£141.70	£144.50	£98.50	£2,153.38
Spend per person in museum	£10.85	£7.64	£0.89	£69.68	£10.43	£7.87	£8.03	£5.47	£15.10 Average
Hours outside museum	0.25	6.5	2	2	56	78	4	2	150.75
Total spend outside museum	£4.00	£530.50	£278.50	£85.00	£1,575.50	£2,452.00	£192.00	£283.45	£5,400.95
Spend per person outside museum	£0.25	£29.47	£15.47	£4.72	£87.53	£136.22	£10.67	£15.75	£300.08 £37.51 Average
2023/2024 Total visitors	611,695	384,860	236,959	19,534	118,429 (2019)	134,665	118,368	58,900	1,683,410

Source: Authors, 2024; National Museum Wales, 2024; Welsh Government, 2022.

Summary findings

Not including lodging or transportation, our group of 18 participants spent a total of £7,554.33 across the 8 museums and communities (Table 1). Only £51.05 was donated directly to the museums, but £2,153.38 was spent within the museum shops, cafes, tours, and exhibitions. These ranged from only £16 in the Waterfront to £1,254.30 (£69.68 per person) in the National Wool Museum, with an average of £15.10 per person per museum. Compared to 2008-2009 data in Bryan et al. (2012, p.138) which suggests an average on-site visitor spend of £1.51, our on-site data is coincidentally ten times the average spending found by NMW.

Outside of the museums, the group collectively spent £5,400.95. This does not count activities covered by pre-paid program fees, including multiple nights of lodging. This value also varied significantly (£4 in St. Fagans, where almost no one visited the village, to £2,452 in Llanberis where the group spent four consecutive nights). The average economic impact per community per person was £37.51. Again, this data is higher, but not to the same extent, as Bryan et al. who estimated overnight visitor spending in 2008-2009 across NMW at £14.70 per visitor (2012, p.138).

Discussion and conclusions

Our welcome is free thanks to funding from the Welsh Government.... In 2015, we launched a new and far-reaching Vision for Amgueddfa Cymru – Museum Wales, Inspiring People, Changing Lives. It is inspired by one big idea: that Amgueddfa Cymru belongs to everyone, it's here to use. (NMW 2020b, p.2)

While NMW's "use" includes a plethora of culturally, politically, and environmentally significant impacts, we argue that, returning to their own language from their 2030 Strategy (NMW 2020a, p.7), NMW is a "national resource", economically, as well as culturally. While they highlight their charity status and their desired role at the center of public services in the Welsh welfare state, the data from this study supports the museum's ongoing goals for greater economic sustainability and awareness of broader economic impact. One of

the commitments made in the 'Strategy 2030' is to "build global connections" and in order to do so, the museum has identified three "wellbeing objectives" to achieve these goals; the third objective is to "support growth of UK and international tourism in Wales" (NMW 2020b). Elsewhere, NMW acknowledges its broader contribution towards the Welsh economy. Many annual financial reports of the 2010s included a one-page infographic summarizing the impacts of the museum over the previous year, such as identifying their 1.9 million visitors and "annual contribution to the Welsh economy" as "£83 million of gross value added" (NMW 2019). This language points to their selfawareness and attention to economic impact well beyond the direct governmental, grant, or profit-driven endeavors.

NMW's profit-driven efforts fall to their subsidiary corporation, National Museums & Galleries of Wales Enterprises Ltd. (NMGW Enterprises), which runs museum cafes, shops, parking fees, and coordinates **NMGW** copyrights and venue hires. Enterprises (pre-pandemic) brought £898,000 in 2018/19, 2.8% of their overall income for the year (NMW 2019). In 2022/23, NMGW Enterprises, after being in the negative during the pandemic, returned to a profit of £515,000 (only 1.3% of the year's income; NMW 2023). Returning to our own data, while the 17.6% of total spending which was directly in the museums is significantly higher than the revenue percentage brought into the museum by NMGW Enterprises, a similar conversation emerges: a national museum's impact is significantly more than its direct earned profits. The NMW, none-the-less aims to "increase income generation through fundraising, [their] commercial activities, collections, research, and public programming to support the delivery of the ten-year strategy," but the values of a national museum such as Wales will never be generated solely within the walls of the institution (NMW 2020b, p.16). As Abdullah and Khadaroo (2017, p.275) argue, income should not be generated directly from within, as they can "change the strategic directions" and hinder the social inclusion of a museum. In two contemporary cases, however, we found sustainable economic endeavors initiated by NMW. The first is Big Pit's partnership with Rhymney Brewery to create three ales specifically for the museum which have

prominent real estate in the museum shop. While too early to judge impact, collaboration follows decades of struggles by the Blaenavon community as they balance high visitation to Big Pit with many fewer people venturing into the town itself and the contested values of preservation development (Jones and Munday 2001). The second being the National Wool Museum's purchase of the private textile operation Melin Teifi, which had been leasing space from the museum, in order to boost its own production of textiles while apprenticing new craftspeople. These are two partnerships which elevate ongoing actions at the national museums without jeopardizing visitor experience or staff conservation. curation. or interpretation efforts.

Not all communities in Wales have or can have a national museum, so there will always be give-and-take attributed to the broader economic impact of national museums. It is likely that very few international tourists will be arriving in Wales with the specific goal of visiting all national museums, as was our case, but instead, they may wrap a free national museum visit (or two) into a broader itinerary. In 2019, 26% of tourist visits in Wales were to museums. (9% of tourist visits were to a NMW museum, specifically; Welsh Government 2022). Did the museums drive the decision to visit Wales? This is unknown; however, as Piekkola et al. (2014) argue in Finland, given the prominence of tourism across NMW, significant influence can be assumed. Those assumptions are further supported by the recent Welsh Government's (2023, p.59) Tailored Review Panel of NMW where surveys identified "the importance of the local AC site in attracting visitors or giving them a reason to stay in a location for longer." Did the free entry to the museums pay back more than a willingness to pay figure might suggest? Perhaps? We spent more than Fujiwara et al.'s (2018) or Bakhshi et al.'s (2015) estimated willingness-to-pay rates (£7.50 - £10.00 calculating for inflation) at every location except the Waterfront and Roman Legion museums. Our average spending of £15.10 per museum far exceeds the top extent of the WTP estimation. It is also significantly higher than that of NWM's own visitor spend calculations. We also spent more outside each museum (except in St. Fagans and Drefach-Felindre):

spending on average £2.48 for every pound spent inside the museums. We did spend significantly more time outside of the museums, but, we believe, were influenced by the museum narratives themselves. These values are also double that of NMW's own 2008/2009 estimates for outside overnight visitor spending (and many of our site visits were not overnight). As none of our group have active Welsh heritage, the national museum system itself helped to inject a value and cultural context into our perceptions. After 15 days of NMW reinforcing the role of the Welsh language, wool, coal, slate, environmental protection, and other key narratives, some of us were more eager to seek out (and purchase) these experiences. Thus, even when the group ventured to communities outside of the system Aberystwyth, museum (e.g. Caernarfon, and Hay-on-Wye), those values instilled at the museums were engrained and impactful.

There are also intersections with international (particularly US) spending patterns. While April-June 2023 US visitors to the UK spent £1,214 per person per visit, significantly higher than the £799 spent per international visitor on average. Comparatively, in Wales, North Americans spent £585 per person as opposed to an overall international average of £480 (Office for National Statistics, 2023). Given our greater than average spending excludes our spending in communities without national museums), alongside the lower-thanaverage spend of international tourists in Wales when compared with the UK, ensuring the sustainability and prominence of heritage tourism assets should be given priority. As Beynon et al. (2018, p.757) argue in their assessment of major Cadw sites, "visitation to heritage sites cannot be guaranteed but have to be planned and managed."

We believe our data, while limited, points towards NWM indeed serving as a multispectral national resource for Wales and supports two major recommendations by the Welsh Government's Tailored Review Panel (2023, p.59-60): "that tracking and measuring AC's economic impact should be a consistent activity in the publicly-funded cultural sphere in Wales" and "that AC...should work on an ongoing basis with Visit Wales to maximise tourist interest." Economically, the role that the

museums play in attracting and serving a growing tourism industry cannot be overstated, and while the museums generate little 'profit' themselves. the data from this study demonstrates that despite their free-to-enter **NMGW Enterprises** status, (alongside donations) is earning more per person than the museums would take in with a WTP model. NMW's free entry also continues to allow its museums to serve as community hubs for local populations, be accessible heritage sites for anyone regardless of economic standing, and shape the national discourse of Welsh identity (i.e. Mason, 2007; Rhodes, 2024).

Future work should explore the possible translations from cultural to economic value

that NMW has, and particularly how far those influential values travel beyond the museum walls. Despite the unknown details of their broader socioeconomic valuations, NMW does impart direct, multiplying economic benefits into the communities it serves thanks, in no small part, to its free entry. Future research is also necessary to better capture indirect effects of local spending connected to NMW. From our findings, we argue that as long as the public (via the Welsh Government) continues to fund NMW to its fullest capacity, they will continue to see their returns on investment in both economic and much broader social, cultural, and political impacts.

References

Abdullah, A. and Khadaroo, I. (2017) The governmentality and accountability of UK national museums and art galleries. *Accounting Forum*, 41(3), pp. 266-276. https://doi.org/10.1016/j.accfor.2016.12.004

Adams, G.K. (2024) Welsh Government urged to reconsider sweeping cuts to museums and heritage. *Museums Journal*, 5 January. Available at:

https://www.museumsassociation.org/museums-journal/news/2024/01/welsh-government-urged-to-reconsider-sweeping-cuts-to-museums-and-heritage/

Association of Leading Visitor Attractions (2004) 2004 visitor figures. Available at: https://www.alva.org.uk/details.cfm?p=603

Bakhshi, H., Fujiwara, D., Lawton, R., Mourato, S. and Dolan, P. (2015) *Measuring economic value in cultural institutions: a report commissioned by the Arts and Humanities Research Council's Cultural Value Project.* Swindon: AHRC, October. Available at: https://assets.publishing.service.gov.uk/media/5a79ca7ae5274a684690c20f/measuring-the-value-culture-report.doc

Beynon, M. J., Jones, C., Munday, M. and Roche, N. (2018) Investigating value added from heritage assets: An analysis of landmark historical sites in Wales. *International Journal of Tourism Research*, 20(6), pp. 756-767. https://doi.org/10.1002/jtr.2228

Bryan, J., Munday, M. and Bevins, R. (2012) Developing a framework for assessing the socioeconomic impacts of museums: the regional value of the 'flexible museum'. *Urban studies*, 49(1), pp. 133-151. https://doi.org/10.1177/0042098010396242

Carvalho, P., Silva Costa, J. and Carvalho, A. (2014) The economic performance of Portuguese museums. *Urban Public Economics Review*, (20), pp. 12-37. Available at https://www.redalyc.org/pdf/504/50432637003.pdf

Department for Digital, Culture, Media & Sport and Hunt, J. (2011) *Ten years of free museums:* landmark policy of providing free access to National Museums reaches 10 year milestone on Thursday 1 December 2011, 29 November. Available at:

https://www.gov.uk/government/news/ten-years-of-free-museums--2#:~:text=2010%2F11%20was%20the%20ninth,%2D01%20and%202010%2F11

Fujiwara, D., Bakhshi, H., Mourato, S., Lawton, R., Hotopp, U., Lagarde, A., and Davies, J. (2018) *The economic value of culture: A benefit transfer study report to the Department for Digital, Culture, Media & Sport.* London: DCMS, October. Available at: https://assets.publishing.service.gov.uk/media/60338821e90e0766066037a9/The Economic Value of Culture - A Benefit Transfer Study - Final report V2.pdf

Greffe, X., Krebs, A. and Pflieger, S. (2017) The future of the museum in the twenty-first century: recent clues from France. *Museum Management and Curatorship*, 32(4), pp. 319-334. https://doi.org/10.1080/09647775.2017.1313126

Gurian, E. H. (2005) Threshold fear. In: Macleod, S. (ed.) *Reshaping museum space*. London: Routledge. pp. 203-214. https://doi.org/10.4324/9780203483220-20

Gwawr, E. (2024) *National Museum will not shut*, minister promises. BBC, 17 April. Available at: https://www.bbc.com/news/articles/crgyxrrkglxo

Horton, N. (2024) *Museums cut 90 jobs and may close Cardiff building*. BBC, 14 April. Available at: https://www.bbc.com/news/articles/cj7mnneprzlo

Hutchison, F. C. (2013) Socio-cultural impacts of museums for their local communities: The case of the Royal Albert Memorial Museum, Exeter. Unpublished thesis (PhD), University of Exeter.

Jones, C. and Munday, M. (2001) Industrial heritage and economic development: the Blaenavon case. *Welsh Economic Review*, 13(2), pp.37-39. https://doi.org/10.18573/wer.172

Mason, R. (2007) *Museums, nations, identities: Wales and its national museums.* Cardiff: University of Wales Press.

National Museum Wales (2010) *Financial report 2009/10*. Cardiff: NMW. Available at: https://museum.wales/media/12920/Amgueddfa-Cymru-Financial-Report-09-10.pdf

National Museum Wales (2019) *Financial report 2018/19*. Cardiff: NMW. Available at: https://museum.wales/media/47843/Amgueddfa-Cymru-Financial-Report-2018-19.pdf

National Museum Wales (2020a) *Amgueddfa Cymru — Museum Wales: Strategy 2030.* Cardiff: NMW. Available at: https://museum.wales/media/54765/AC-Strategy-b-ENG.pdf

National Museum Wales (2020b) *5 Year Business Plan 2021/22 – 2025/26.* Cardiff: NMW. Available at https://museum.wales/media/56417/5-year-Business-Plan-2021-2026-.pdf

National Museum Wales (2023) *Financial report 2022/23*. Cardiff: NMW. Available at: https://museum.wales/media/58295/financial-report-2022-23.pdf

National Museum Wales (2024) *Actual Figures for 2023-2024: Amgueddfa Cymru – Museum Wales.* Cardiff: NMW. Available at: https://museum.wales/visitor_figures/april-2023-march-2024/

National Museums and Galleries of Wales (2001) *Report: annual report of the council 2000-2001*. Cardiff: NMGW. Available at:

https://www.google.com/url?sa=t&source=web&rct=j&opi=89978449&url=https://museum.wales/media/20/ar2000-

2001.en.pdf&ved=2ahUKEwja0ujovLulAxUAUUEAHRzXGYIQFnoECBYQAQ&usg=AOvVaw3hT lsWdLxc0DR9CWpny7X4

Office for National Statistics (2023) Estimates of overseas residents' visits and spending - Quarter 2 (Apr to June) 2023 edition of this dataset. Available at: https://www.ons.gov.uk/file?uri=/peoplepopulationandcommunity/leisureandtourism/datasets/esti

<u>matesofoverseasresidentsvisitsandspendingintheuk/quarter2aprtojune2023/overseasresidentsvisitstotheukquarter22023.xlsx</u>

Piekkola, H., Suojanen, O. and Vainio, A. (2014) *Economic impact of museums*. Vaasa: University of Vaasa, Levón Institute. Available at:

https://www.google.com/url?sa=t&source=web&rct=j&opi=89978449&url=https://www.ecsite.eu/sites/default/files/isbn 978-952-476-524-4.pdf&ved=2ahUKEwiX-

YLjvbulAxUSXUEAHc7REZEQFnoECBQQAQ&usg=AOvVaw0FPXB911Mq0fVlxj0WEAKB

Plaza, B. (2006) The return on investment of the Guggenheim Museum Bilbao. *International Journal of Urban and Regional Research*, 30(2), pp. 452-467. https://doi.org/10.1111/j.1468-2427.2006.00672.x

Price, W. R. and Ronck, C. L. (2019) Quarrying for world heritage designation: slate tourism in North Wales. *Geoheritage*, 11(4), pp. 1839-1854. https://doi.org/10.1007/s12371-019-00402-0

Rhodes, M. A. (2024) National Museum Wales and the scalar bureaucracies of institutional memory work. *Political Geography*, 111. https://doi.org/10.1016/j.polgeo.2024.103094

Silberberg, T. & Lord, G. (2013) Balancing mission and money: Issues in museum economics. In: McCarthy, C. (ed.) *The International Handbooks of Museum Studies*. Hoboken, NJ: Wiley. pp.155-178. https://doi.org/10.1002/9781118829059.wbihms207

Stynes, D. J. and White, E. M. (2006) Reflections on measuring recreation and travel spending. *Journal of Travel Research*, 45(1), pp. 8-16. https://doi.org/10.1177/0047287506288873

Thomas, C. N. (2017) National identity through the connotation of cloth. *The Student Researcher*, 4(1), pp. 1-17.

Travers, T. (2006) *Museums and galleries in Britain: economic, social and creative impacts*. London School of Economics, December. Available at:

https://www.nationalmuseums.org.uk/media/documents/publications/museums galleries in brita in travers 2006.pdf

Welsh Government (2022) *Visits to tourist attractions in Wales 2019 & 2020*: report for Visit Wales. Cardiff: Welsh Government, 20 January. Available at:

https://www.gov.wales/sites/default/files/statistics-and-research/2022-01/visits-to-tourist-attractions-in-wales-2019-2020.pdf

Welsh Government (2023) *Final report of the Tailored Review Panel*. Cardiff: Welsh Government, 13 July. Available at: https://www.gov.wales/sites/default/files/publications/2023-07/national-museum-wales-tailored-review.pdf

Whelan, G. (2015) Understanding the social value and well-being benefits created by museums: A case for social return on investment methodology. *Arts & Health*, 7(3), pp. 216-230. https://doi.org/10.1080/17533015.2015.1065574