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**REAL PRODUCT AND PRODUCTIVITY OF INDUSTRIES SINCE THE 19TH
CENTURY: A REPLY TO BRYAN HAIG**

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File: AustraliaHaigReply1

In our article “Lost Exceptionalism? Comparative Income and Productivity in Australia and the UK, 1861-1948,” we use sectoral output and employment data from Australia and the United Kingdom to determine relative productivity levels between the two countries. As Bryan Haig (2008) points out in his comment, the standard series for Australian GDP created by Noel Butlin (1962) have long been known to have shortcomings. As a result, Haig (2001) has produced an alternative series of sectoral GDP, which attempts to correct for some of the shortcomings. However, as yet, Haig’s series have not been universally accepted, with Maddison (2003: 72-75) continuing to use Butlin (1962) for the pre-1911 period, where the main differences lie.

Precisely because of the controversy surrounding the Butlin (1962) figures, we chose to present our results also using Haig’s (2001) figures at the aggregate level. The reader can choose for him- or herself which results they prefer based on their opinion of the Butlin and Haig series.

As consumers of data, we started our project quite agnostic about the relative merits of Butlin (1962) and Haig (2001), which is why we present both results in our paper. We do believe, however, that an experienced historical national accountant should thoroughly go over the Butlin and Haig components and, along with other new data, produce a revised national income and sectoral output series for Australia. Then our work could also be redone based on that new information. Fortunately, the two series track quite closely for most periods of Australia’s history. The big discrepancy between

the two series is the severity of the depression in the 1890s. In our view, the Butlin (1962) series is more consistent with other data, such as imports, that suggested the depression was quite severe, whereas the Haig (2001) series tend to minimise the overall economic downturn. Haig (2008) mentions that the decline in imports was affected by maritime strikes in 1890. But the strikes lasted from August-November 1890, whereas real imports fell by about a quarter from 1891 to 1894 (Boehm 1971). For this reason, we focus more on the Butlin (1962) results than on the Haig (2001) results, but the latter results should still be viewed with great interest.

Haig (2008) thinks it is implausible that manufacturing labour productivity could have been 70% higher in Australia than in the United Kingdom in the late nineteenth century. And yet it is widely accepted that in the United States, a New World settler economy like Australia, manufacturing labour productivity was twice the UK level at this time (Broadberry and Irwin, 2006). Indeed, Rothbarth (1946) and Habakkuk (1962) famously attributed this large US productivity lead to land abundance, something which applies with equal force to Australia. From this perspective, the surprising thing is perhaps Australia's failure to match and keep up with the United States, a theme pursued recently by McLean (2007).

To conclude, we welcome any and all attempts to improve the underlying data behind our calculations and the interpretation of the results. There is clearly the need for additional work in this area.

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