

INTISARI

Permasalahan transportasi muncul seiring meningkatnya jumlah kendaraan pribadi dan semakin tingginya aktivitas serta mobilitas masyarakat. Kereta api dipandang sebagai salah satu solusi untuk mengatasi permasalahan tersebut. Penelitian ini bertujuan untuk menganalisis faktor-faktor yang mempengaruhi kesediaan calon pengguna untuk menggunakan kereta api Magelang-Yogyakarta-Bantul (MYB), *ability to pay* (ATP), *willingness to pay* (WTP), probabilitas kesediaan calon pengguna dan *benefit* pengoperasian kereta api.

Survei menggunakan metode *stated preference*. Analisis ATP menggunakan pendekatan *travel cost*. WTP diperoleh dengan menganalisis preferensi responden terhadap skenario pelayanan kereta menggunakan *ordered probit*. Analisis *benefit* dari aspek biaya operasional kendaraan (BOK) menggunakan metode LAPI ITB, biaya waktu perjalanan (BWP) menggunakan metode produktivitas dan biaya polusi udara menggunakan *marginal health cost*.

Hasil yang diperoleh adalah ATP rata-rata pengguna motor pada rute MY Rp.533/Km, YB Rp.475/Km dan MYB Rp.494/Km. ATP rata-rata pengguna mobil MY Rp.939/Km, YB Rp.1.037/Km dan MYB Rp.1.146/Km. ATP rata-rata pengguna bus MY Rp.341/Km, YB Rp.500/Km dan MYB Rp.479/Km. WTP pengguna motor rute MY Rp.6.000, YB Rp.6.000 dan MYB Rp.8.000. WTP pengguna mobil MY, YB dan MYB adalah Rp.8.000. WTP pengguna bus MY Rp.6.000, YB Rp.6.000 dan MYB Rp.8.000. Probabilitas kesediaan pengguna motor rute MY adalah 82,14%, YB 72,29% dan MYB 59,00%. Probabilitas pengguna mobil MY adalah 76,87%, YB 74,08% dan MYB 62,26%. Probabilitas pengguna bus MY adalah 93,78%, YB 90,41% dan MYB 63,05%. *Benefit* penghematan BOK mobil rute MY adalah Rp.25.521, YB Rp.25.563 dan MYB Rp.17.782. Penghematan BOK motor MY adalah Rp.4.488, YB Rp.5.756 dan MYB Rp.3.068. *Benefit* penghematan BWP mobil rute MY adalah Rp.7.556, YB Rp.10.160 dan MYB Rp.5.169. Penghematan BWP motor MY adalah Rp.4.892, YB Rp.8.151 dan MYB Rp.6.622. *Benefit* berkurangnya biaya polusi mobil rute MY adalah Rp.8.432, YB Rp.8.313 dan MYB Rp.6.513. Berkurangnya biaya polusi motor MY adalah Rp.974, YB Rp. 1.398 dan MYB Rp.1.173.

Kata kunci: ATP, WTP, *stated preference*, *ordered probit*, probabilitas, *benefit*.

ABSTRACT

Transportation problems arise as the increasing number of private vehicles and the higher of community activities and mobilities. Railways are seen as one of the solution to overcome these problems. This study aims to analyze the factors that influence the willingness of prospective users to use the Magelang-Yogyakarta-Bantul (MYB) train, ability to pay (ATP), willingness to pay (WTP), the probability of the willingness of the prospective user and the railway operation benefit.

Survey uses stated preference method. ATP analysis uses travel cost approach. WTP is obtained by analyzing respondent's preference for train service scenario by using ordered probit. Benefit analysis of vehicle operational cost (VOC) aspects uses LAPI ITB method, travel time cost (TTC) uses productivity method and air pollution cost uses marginal health cost.

The results are the average of ATP motorcycle users on MY route is Rp.533 / Km, YB route is Rp.475 / Km and MYB route is Rp.494 / Km. Average of ATP private car users on MY route is Rp.939 / Km, YB route is Rp.1.037 / Km and MYB route is Rp.1.146 / Km. average ATP bus user on MY route is Rp.341 / Km, YB route is Rp.500 / Km and MYB route is Rp.479 / Km. WTP motorcycle users on MY route is Rp.6.000, YB route is Rp.6.000 and MYB route is Rp.8.000. WTP private car users on MY, YB and MYB routes are Rp.8.000. WTP bus users on MY route is Rp.6.000, YB route is Rp.6.000 and MYB route is Rp.8.000. The probability of motorcycle user willingness to use train on MY route is 82.14%, YB route is 72.29% and MYB route is 59.00%. The probability of private car users on MY route is 76.87%, YB route is 74.08% and MYB route is 62.26%. The probability of bus user on MY route is 93.78%, YB route is 90.41% and MYB route is 63.05%. Benefits of private car's VOC on MY route is Rp.25.521, YB route is Rp.25.563 and MYB route is Rp.17.782. Benefits of motorcycle's VOC on MY route is Rp.4.488, YB route is Rp.5.756 and MYB route is Rp.3.068. Benefits of TTC for private car users on MY route is Rp.7.556, YB route is Rp.10.160 and MYB route is Rp.5.169. Benefits of TTC for motorcycle users on MY route is Rp.4.892, YB route is Rp.8.151 and MYB route is Rp.6.622. Benefit of car's pollution costs on MY route is Rp.8.432, YB route is Rp.8.313 and MYB route is Rp.6.513. Benefit of motorcycle's pollution costs on MY route is Rp.974, YB route is Rp. 1,398 and MYB route is Rp.1.173.

Keywords: ATP, WTP, stated preference, ordered probit, probability, benefit.