Let's Dance ... With Someone Else? Empirical Evidence on Determinants of Match Separation

František Kopriva, Pavla Nikolovová, Mário Vozár CERGE-EI

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Non-technical summary

Over the last forty years, the interest of economists in the issue of the formation and separation of marriages and other types of partnership has been rising, and several theories of search and matching have been developed to describe and model these phenomena. Particular attention has been given to the discussion of reasons for which partnership end, and two competing theories have been developed to explain the phenomenon of match separation. The first theory explains match separation as given by continuous search for a better partner in the situation when the match quality is directly observable. The second theory sees the match separation as caused by the inability to observe the match quality at the beginning of the relationship, but only revealed by experience. In the former case, match quality is said to be a search good, in the latter case, it is considered to be an experience good. For both theories, the match quality is the key element of the model, based on which agents decide whether to enter a relationship, stay together or separate.

In this paper, we contributed to the understandings of different determinants of match separation proposed by matching market theory. We focused particularly on two main causes of match separation search frictions and initial uncertainty about match quality, which are described in theoretical literature and which are tested in the context of marriage and labor markets. We claim that in theses markets, it is it is difficult if not impossible for the researcher to observe the objective match quality and therefore it is problematic to assess its impact on the stability of the match.

To add a new perspective to this issue, we used a unique dataset containing records from Czech ballroom dancing competition. Ballroom dancing is a particular matching market that mimics several important characteristics of a marriage market: monogamic couples of individuals of opposite gender are formed in order to perform some common task from which both partners derive their utility. In addition, in this market, the performance of the couple is evaluated regularly by referees on competitions in which the couples participate, which provided us with a measure of objective match quality and its evolution over time. Moreover, we were able to observe also the individuals' performance over their whole career and assess information about their potential talent.

After excluding exogenous causes of match separations like end of the career or migrating to another city we identified over 600 matches that ended due to the two determinants of match separations that are proposed by theoretical literature.

Further we were able to divide these matches into two groups with respect to the causes of match separation. Through a series of different test, we provided an evidence that whereas the first group contained only those matches that ended due to the unsatisfactory realization of match quality, in the second group, the dominant reason for match separation was the ``on the job search" for better partner caused by the presence of search frictions. To mention some of our findings in greater detail:

- In most of the couples that broke up due to the unsatisfactory realization of match quality, the two partners had similar observable talent. On the other hand, matches in the other group (where search frictions may have been the reason for match separation) were significantly mismatched with respect to partners' talent.
- However, we found that this was not the case in the next iteration of matching. This suggests that individuals in "mismatched" couples found a more appropriate partner with respect to their personal quality in the next iteration of matching which corresponds with predictions of search models.
- In addition, we conducted econometric analysis studying significance of search frictions presence and match quality evolution on the probability of match separation in the two groups of matches we constructed. We found that search frictions matter in the second group, where the partners were mismatched with respect of partners' observable talent, whereas match quality evolution matters for couples that are balanced in terms of partners' observable talent and do not break up to find a better partner.

These results let us believe that indeed both prevalent theories of reason for match separation discussed in the theoretical literature, namely search frictions and initial uncertainty about match quality, play a significant role and both of them should be taken into account.