P. Milgrom and R. Weber [20] and R. Radner and R. Rosenthal [27].[6]

Their approach is based on distributional strategies and it is entirely different than ours, which is based on measurable functions. For purposes of comparison, it may be instructive to briefly outline their approach. Following [20] a game is a sextuple $\mathcal{G} = (N, \{T_i\}_{i\in N}, \{A_i\}_{i\in N}, T_0, \{u_i\}_{i\in N}, \zeta)$, where

1. $N = \{1, 2, \ldots, n\}$ is the set of *players*.

2. $\{T_i : i \in N\}$ is the set of *types* for each player. Each $T_i$ is a complete and separable metric space.

3. $\{A_i : i \in N\}$ is the set of *actions* for each player. Each $A_i$ is a compact metric space.

4. $T_0$ is the set of possible *states*; $T_0$ is a complete and separable metric space.

5. $u_i : T \times A \to R$ (where $T = T_0 \times \cdots \times T_n$ and $A = A_1 \times \cdots \times A_n$) is the *payoff function* of player $i$. Each $u_i$ is bounded and measurable.

6. $\zeta$ is the *information structure* and is a probability measure on the Borel subsets of $T$. Denote by $\zeta_i$ the marginal distribution on each $T_i$.

A *distributional strategy* for player $i$ is a probability measure $\mu_i$ on the Borel subsets of $T_i \times A_i$ such that the marginal distribution of $T_i$ is $\zeta_i$. The expected payoff of player $i$ is:

$$V_i(\mu_1, \ldots, \mu_n) = \int u_i(t, a)\, \mu_1(da_1|t_1) \ldots \mu_n(da_n|t_n)\, \zeta(dt). \tag{6.1}$$

The two basic assumptions that P. Milgrom and R. Weber [20] make are:

a. Payoffs are equicontinuous; and

b. The information structure is absolutely continuous.

Conditions which imply either (a) or (b) are given in [20, p. 625]. Balder has succeeded in generalizing their results by relaxing (a), but he still needs (b).[7] For the proof of Theorem 4.2 we did not make use of any of these assumptions and no equicontinuity assumption was needed for the proof of Theorem 5.1. It is important to note that assumption (b) allows the above authors to express the expected utility (6.1) in a convenient way (see [20, p. 625] or [6]). In particular, once distributional strategies are topologized with the weak convergence, the strategy sets are compact metric spaces, the expected utility is continuous and linear and therefore the standard results of either Glicksberg, Fan, or Browder (see [20] or [6]) can be directly applied to prove the existence of an equilibrium.

[6]Since the connection between [20] and [27] has already been discussed by P. Milgrom and R. Weber elsewhere (see [20] for an exact reference), we shall focus on the mixed strategy equilibrium existence results given in [6] and [20].

[7]It should also be mentioned that Balder does not impose any topological structure on the type spaces $T_i$.